

**P**OST

**H**OSPITALIZATION

**O**UTCOMES

**S**TUDIES

**Final Report**

HCFA #500-90-0046

**September 1996**

**DATA COLLECTION INSTRUMENTS**

**VOLUME II**

**DIVISION OF  
HEALTH SERVICES  
RESEARCH AND POLICY**

**School of Public Health**

**UNIVERSITY OF MINNESOTA**









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P67  
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v.3

# **P**ost **H**ospitalization **O**utcomes **S**tudies



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## **Final Report**

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**Cholecystectomy**  
**Worksheet**





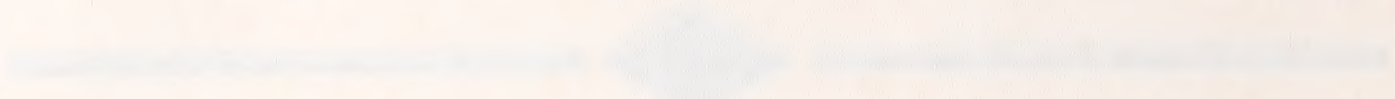


**MINNESOTA PHOS**

**CHOLECYSTECTOMY**

**WORKSHEET**

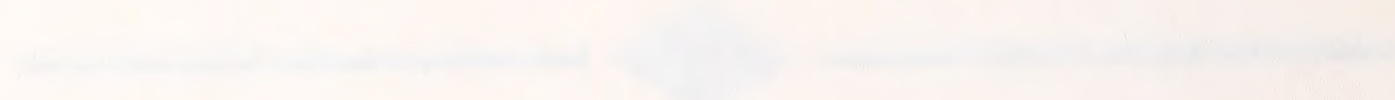




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**MINNESOTA PHOS  
CHOLECYSTECTOMY  
Worksheet**

PATIENT DEMOGRAPHICS

<b>phosid</b>	1.	PHOS ID#:	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
<b>hic</b>	2.	HIC #:	<input type="text"/> <input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
<b>mr</b>	3.	Medical Record #:	<input type="text"/>	
<b>fn, ln</b>	4.	Patient Name:	<input type="text"/>	
<b>prov</b>	5.	Provider Number:	<input type="text"/>	
<b>hospn</b>	6.	Hospital Name:	<input type="text"/>	
<b>hospad</b>	7.	Hospital Address:	<input type="text"/>	
<b>hospcity</b>			<input type="text"/>	
<b>hospzip</b>			<input type="text"/>	
<b>admitd</b>	8.	Date of Admission:	<input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/> M M D D Y Y	
<b>dcd</b>	9.	Date of Discharge:	<input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/> M M D D Y Y	
<b>dob</b>	10.	Date of Birth:	<input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/> - <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> M M D D Y Y Y Y	
<b>prproc</b>	11.	Pri-Proc:	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
<b>state</b>	12.	State:	<input type="text"/> <input type="text"/>	
<b>gender</b>	13.	Gender:	<input type="text"/>	1 = Male 2 = Female 9 = Unknown
<b>ins</b>	14.	Insurance:	<input type="text"/>	1 = Medicaid 2 = Medigap 3 = Other 4 = No Other Insurance 9 = Inadequate Documentation





Minnesota PHOS  
Elective Cholecystectomy

race 15. Race: ☐ 1 = White 5 = Native American  
2 = Hispanic 8 = Other  
3 = Black 9 = Unknown  
4 = Asian

reab 16. Re-abstract: ☐☐☐

abid 17. Ab Id: ☐☐☐

RECORD VERIFICATION

pdx Verify that the medical record selection is appropriate.

pprcr Is the principal procedure criteria met? ☐ 0 = No  
1 = Yes

app Approval to proceed? ☐ 0 = No  
1 = Yes

If an exclusion exists and approval to proceed has not been verified, stop here. If no exclusion or you have approval to proceed, continue abstraction.

USUAL LEVEL OF FUNCTION

→ adht adhtu  
18. Admission Height . ☐ 1 = inches  
2 = cm  
9 = Unknown

→ adwt adwtu  
19. Admission Weight: . ☐ 1 = lbs  
2 = kilos  
9 = Unknown

blcont 20. Bladder Continence: ☐ 1 = Continent  
2 = Incontinent  
3 = Dialysis/No urine output  
9 = Inadequate Documentation

bowcont 21. Bowel Continence: ☐ 1 = Continent  
2 = Incontinent  
3 = Bowel Ostomy  
9 = Inadequate Documentation





Minnesota PHOS  
*Elective Cholecystectomy*

**mobil** 22. Mobility:

☐

1 = Independent  
ambulation  
2 = Cane  
3 = Walker

4 = Wheelchair  
5 = Bedridden  
8 = Other  
9 = Unknown

History of Substance Use

**hsmoke** 23. Does patient have a smoking history? ☐

0 = No  
1 = Yes  
9 = Unknown

**halcoho** 24. Chronic Alcohol Abuser? ☐

0 = No  
1 = Yes  
9 = Unknown

HISTORY AND PHYSICAL

Neurological

Neurological History

**nhhead** 25. History of Headache ☐

0 = No  
1 = Yes  
9 = Unknown

Neurological Disease

**ncog** 26. Cognitive Deficit/Mental Retardation ☐

0 = No  
1 = Yes  
9 = Unknown

**neva** 27. History of CVA ☐

0 = No  
1 = Yes  
9 = Unknown

**ncvahem** 28. CVA Known to be Hemorrhagic ☐

0 = No  
1 = Yes  
9 = Unknown

Current Neurological Disease

**unsynco** 29. Syncope ☐

0 = No  
1 = Yes  
9 = Unknown

**uncvati** 30. Cerebrovascular Accident/TIA ☐

0 = No  
1 = Yes  
9 = Unknown





Cardiovascular

Cardiac Disease History

charrhy 31. Arrhythmia

☐

0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to #32.  
If answer is "YES", complete this section.

charsvt a. Sustained Ventricular  
Tachycardia

☐

0 = No  
1 = Yes  
9 = Unknown

charhb2 b. Heart Block, 2nd Degree

☐

0 = No  
1 = Yes  
9 = Unknown

charhb3 c. Heart Block, 3rd degree

☐

0 = No  
1 = Yes  
9 = Unknown

charsa d. Supraventricular  
Arrhythmia

☐

0 = No  
1 = Yes  
9 = Unknown

charva e. Ventricular Arrhythmia

☐

0 = No  
1 = Yes  
9 = Unknown

charsnd f. Sinus Node Dysfunction

☐

0 = No  
1 = Yes  
9 = Unknown

charnbt g. Nonmalignant Bradycardia  
or Tachyarrhythmia

☐

0 = No  
1 = Yes  
9 = Unknown

chhtn 32. Hypertension

☐

0 = No  
1 = Yes  
9 = Unknown

chami 33. Acute MI

☐

0 = No  
1 = Yes  
9 = Unknown





Minnesota PHOS  
*Elective Cholecystectomy*

chang 34. Angina ☐ 0 = No  
1 = Yes  
9 = Unknown

chvalv 35. Valvular Disease ☐ 0 = No  
1 = Yes  
9 = Unknown

chchf 36. Congestive Heart Failure ☐ 0 = No  
1 = Yes  
9 = Unknown

History of Cardiovascular Surgery

chscaa 37. Coronary Artery Angioplasty ☐ 0 = No  
1 = Yes  
9 = Unknown

chscabg 38. CABG ☐ 0 = No  
1 = Yes  
9 = Unknown

chsintr 39. Intracardiac (valve, aneurysm) ☐ 0 = No  
1 = Yes  
9 = Unknown

chspvs 40. Peripheral Vascular Surgery ☐ 0 = No  
1 = Yes  
9 = Unknown

Current CV

ucvcp 41. Chest Pain (steady) ☐ 0 = No  
1 = Yes  
9 = Unknown

ucvarrh 42. Arrhythmia ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to #43.  
If answer is "YES", complete this section.

ucvsvt a. Sustained Ventricular Tachycardia ☐ 0 = No  
1 = Yes  
9 = Unknown

ucvhb2 b. Heart Block, 2nd Degree ☐ 0 = No  
1 = Yes  
9 = Unknown





Minnesota PHOS  
*Elective Cholecystectomy*

ucvhb3	c.	Heart Block, 3rd degree	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
ucvsa	d.	Supraventricular Arrhythmia	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
ucvva	e.	Ventricular Arrhythmia	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
ucvsnd	f.	Sinus Node Dysfunction	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
ucvnbt	g.	Nonmalignant Bradycardia or Tachyarrhythmia	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
ucvshoc 43.		Shock	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
ucvmega44.		Cardiomegaly	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
ucvped 45.		Pulmonary Edema	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
ucvpede 46.		Peripheral Edema	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
ucvpd 47.		Pulse Deficit	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown

Vascular Disease

cvcvd 48.		Central Vascular Disease	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
cvpvd 49.		Peripheral Vascular Disease	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown





Pulmonary

Pulmonary History

phcpd 50. Chronic Pulmonary Disease ☐ 0 = No  
1 = Yes  
9 = Unknown

phps 51. History of Pulmonary Surgery ☐ 0 = No  
1 = Yes  
9 = Unknown

Current Pulmonary

upcohem 52. Cough - Hemoptysis ☐ 0 = No  
1 = Yes  
9 = Unknown

upcprod 53. Cough - Productive ☐ 0 = No  
1 = Yes  
9 = Unknown

upconon 54. Cough - Non-productive ☐ 0 = No  
1 = Yes  
9 = Unknown

uplb 55. Labored Breathing ☐ 0 = No  
1 = Yes  
9 = Unknown

History of Cancer

hca 56. Cancer ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN" skip to #57.  
If answer is "YES", complete this section.

hcatype a. Specify Type of Cancer: \_\_\_\_\_

hcastag b. Indicate Stage ☐ 1 = Local  
2 = Regional  
3 = Metastatic  
9 = Unknown



Abdominal

Abdominal GI Symptoms/Disease/Surgery

- |                    |   |                          |  |
|--------------------|---|--------------------------|--|
| <b>anausea 57.</b> | Nausea                                    | <input type="checkbox"/> | 0 = No<br>1 = Hx<br>2 = Admission<br>3 = Both<br>9 = Unknown |
| <b>avomit 58.</b>  | Vomiting                                  | <input type="checkbox"/> | 0 = No<br>1 = Hx<br>2 = Admission<br>3 = Both<br>9 = Unknown |
| <b>afoodin 59.</b> | Food Intolerance                          | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown                             |
| <b>aflat 60.</b>   | Flatulence                                | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown                             |
| <b>ahtburn 61.</b> | Heartburn                                 | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown                             |
| <b>ajaun 62.</b>   | Jaundice                                  | <input type="checkbox"/> | 0 = No<br>1 = Hx<br>2 = Admission<br>3 = Both<br>9 = Unknown |
| <b>aruqmas63.</b>  | RUQ Mass                                  | <input type="checkbox"/> | 0 = No<br>1 = Hx<br>2 = Admission<br>3 = Both<br>9 = Unknown |
| <b>aruqtot 64.</b> | Abdominal/RUQ Pain/Tenderness<br>to touch | <input type="checkbox"/> | 0 = No<br>1 = Hx<br>2 = Admission<br>3 = Both<br>9 = Unknown |
| <b>aradp 65.</b>   | Any radiating Pain (Abdominal)            | <input type="checkbox"/> | 0 = No<br>1 = Hx<br>2 = Admission<br>3 = Both<br>9 = Unknown |





Minnesota PHOS  
*Elective Cholecystectomy*

awtloss 66.	Weight Loss	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
aepip 67.	Epigastric Pain	<input type="checkbox"/>	0 = No 1 = Hx 2 = Admission 3 = Both 9 = Unknown
abelch 68.	Belching	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
amurph 69.	Murphy's Sign	<input type="checkbox"/>	0 = No 1 = Hx 2 = Admission 3 = Both 9 = Unknown
alosapp 70.	Loss of Appetite	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
ahepat 71.	Hepatic Disease	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
abiltd 72.	Biliary Tract Disease	<input type="checkbox"/>	0 = No 1 = Hx 2 = Admission 3 = Both 9 = Unknown
apancrd 73.	Pancreatic Disease	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
aadapan 74.	Acute Pancreatitis on Admission	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
ahgisx 75.	History of GI Surgery	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
agid 76.	Upper GI Disease	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
agibl 77.	GI Bleeding	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown





Minnesota PHOS  
*Elective Cholecystectomy*

- |              |   |                          |  |
|--------------|---|--------------------------|--|
| acolicp 78.  | Colicky Pain                              | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown                             |
| aepbile 79.  | More Than One Episode of Biliary Colic    | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown                             |
| aepachl 80.  | Acute Cholecystitis Episode               | <input type="checkbox"/> | 0 = No<br>1 = Hx<br>2 = Admission<br>3 = Both<br>9 = Unknown |
| aporhttn 81. | Portal Hypertension                       | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown                             |
| apreasx 82.  | Previous Abdominal Surgery                | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown                             |
| asscar 83.   | Upper Abdominal Surgical Scars/ Adhesions | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown                             |
| amucogb 84.  | Empyema and Mucocele of Gallbladder       | <input type="checkbox"/> | 0 = No<br>1 = Hx<br>2 = Admission<br>3 = Both<br>9 = Unknown |
| aelsamy 85.  | Elevated Serum Amylase                    | <input type="checkbox"/> | 0 = No<br>1 = Hx<br>2 = Admission<br>3 = Both<br>9 = Unknown |
| aeluamy 86.  | Elevated Urine Amylase                    | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown                             |

Current Abdominal

- |            |                |                          |                                  |
|------------|----------------|--------------------------|----------------------------------|
| uamass 87. | Abdominal Mass | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown |
|------------|----------------|--------------------------|----------------------------------|



Minnesota PHOS  
*Elective Cholecystectomy*

**uadist** 88. Abdominal Distention ☐ 0 = No  
 1 = Yes  
 9 = Unknown

**uarectb** 89. Rectal Blood ☐ 0 = No  
 1 = Yes  
 9 = Unknown

**uargr** 90. Abdominal Rigidity/Guarding/  
 Rebound ☐ 0 = No  
 1 = Yes  
 9 = Unknown

**uascite** 91. Ascites ☐ 0 = No  
 1 = Yes  
 9 = Unknown

History of Autoimmune Disease

**had** 92. Autoimmune Disease ☐ 0 = No  
 1 = Yes  
 9 = Unknown

History Major Organ Removal

**hos** 93. Major Organ Removal ☐ 0 = No  
 1 = Yes  
 9 = Unknown

**hosliv** 94. Liver Transplant ☐ 0 = No  
 1 = Yes  
 9 = Unknown

History of Endocrine/Diabetes

**hedced** 95. Chronic Endocrine Disease ☐ 0 = No  
 1 = Yes  
 9 = Unknown

**heddm** 96. Diabetes ☐ 0 = No  
 1 = IDDM  
 2 = NIDDM  
 9 = Unknown

**hedshiv** 97. HIV+, Symptomatic ☐ 0 = No  
 1 = Yes  
 9 = Unknown

**hedahiv** 98. HIV+, Asymptomatic ☐ 0 = No  
 1 = Yes  
 9 = Unknown





Minnesota PHOS  
*Elective Cholecystectomy*

hedcwl 99. Chronic Weight Loss ☐ 0 = No  
1 = Yes  
9 = Unknown

hedcsi 100. Chronic Systemic Infection ☐ 0 = No  
1 = Yes  
9 = Unknown

Urological History

hurofp 101. Flank Pain ☐ 0 = No  
1 = Yes  
9 = Unknown

hurocrf 102. Chronic Renal Failure ☐ 0 = No  
1 = Yes  
9 = Unknown

Musculoskeletal History

kbp 103. Back Pain ☐ 0 = No  
1 = Yes  
9 = Unknown

Non-Specific Findings

nsfever 104. Fever  $>101^{\circ}\text{F}$  or  $38.3^{\circ}\text{C}$  ☐ 0 = No  
1 = Hx  
2 = Admission  
3 = Both  
9 = Unknown

nschill 105. Chills ☐ 0 = No  
1 = Hx  
2 = Admission  
3 = Both  
9 = Unknown

nsewbc 106. Elevated WBC ☐ 0 = No  
1 = Hx  
2 = Admission  
3 = Both  
9 = Unknown

nsshift 107. Left Shift ☐ 0 = No  
1 = Hx  
2 = Admission  
3 = Both  
9 = Unknown



LABORATORY TESTS

Chemistry

→ 108. Total Bilirubin

a. Preoperative

**lmtbpr**  
(0 = None)

□□.□

**lmtbpc**  
Code

□  
1 = UMOL/L  
2 = MG/DL  
3 = SI  
8 = Other  
9 = Unknown

**lmtbpd**  
Date

□□-□□-□□  
M M D D Y Y

**lmtbpa**  
Abnormal

□  
1 = Normal  
2 = BNL  
3 = ANL  
4 = Noted to  
be abnormal  
9 = Unknown

→

b. Interim

**lmtbir**  
(0 = None)

□□.□

**lmtbic**  
Code

□  
1 = UMOL/L  
2 = MG/DL  
3 = SI  
8 = Other  
9 = Unknown

**lmtbid**  
Date

□□-□□-□□  
M M D D Y Y

**lmtbia**  
Abnormal

□  
1 = Normal  
2 = BNL  
3 = ANL  
9 = UNK

→

c. Final

**lmtbfr**  
(0 = None)

□□.□

**lmtbfc**  
Code

□  
1 = UMOL/L  
2 = MG/DL  
3 = SI  
8 = Other  
9 = Unknown

**lmtbfd**  
Date

□□-□□-□□  
M M D D Y Y

**lmtbfa**  
Abnormal

□  
1 = Normal  
2 = BNL  
3 = ANL  
9 = UNK

109. BUN

→

a. Preoperative

**lmbunpr**  
(0 = None)

□□□

**lmbunpc**  
Code

□  
1 = UMOL/L  
2 = MG/DL  
3 = SI  
8 = Other  
9 = Unknown

**lmbunpd**  
Date

□□-□□-□□  
M M D D Y Y

**lmbunpa**  
Abnormal

□  
1 = Normal  
2 = BNL  
3 = ANL  
4 = Noted to  
be abnormal  
9 = UNK

→

b. Interim

**lmbunir**  
(0 = None)

□□□

**lmbunic**  
Code

□  
1 = UMOL/L  
2 = MG/DL  
3 = SI  
8 = Other  
9 = Unknown

**lmbunid**  
Date

□□-□□-□□  
M M D D Y Y

**lmbunia**  
Abnormal

□  
1 = Normal  
2 = BNL  
3 = ANL  
9 = UNK

→

c. Final

**lmbunfr**  
(0 = None)

□□□

**lmbunfc**  
Code

□  
1 = UMOL/L  
2 = MG/DL  
3 = SI  
8 = Other  
9 = Unknown

**lmbunfd**  
Date

□□-□□-□□  
M M D D Y Y

**lmbunfa**  
Abnormal

□  
1 = Normal  
2 = BNL  
3 = ANL  
9 = UNK





Minnesota PHOS  
Elective Cholecystectomy

110. Creatinine

→

a. Preoperative

**Imcrepr**  
(0= None)

□□□□

**Imcrepc**  
Code

□

1 = MB/DL  
8 = Other  
9 = Unknown

**Imcrepd**  
Date

□□-□□-□□

MM DD YY

**Imcrepa**  
Abnormal

□

1 = Normal  
2 = BNL  
3 = ANL  
4 = Noted to  
be abnormal  
9 = UNK

→

b. Interim

**Imcreir**  
(0= None)

□□□□

**Imcreic**  
Code

□

1 = MG/DL  
8 = Other  
9 = Unknown

**Imcreid**  
Date

□□-□□-□□

MM DD YY

**Imcreia**  
Abnormal

□

1 = Normal  
2 = BNL  
3 = ANL  
9 = UNK

→

c. Final

**Imcrefr**  
(0= None)

□□□□

**Imcrefc**  
Code

□

1 = MG/DL  
8 = Other  
9 = Unknown  
9 = UNK

**Imcrefd**  
Date

□□-□□-□□

MM DD YY

**Imcrefa**  
Abnormal

□

1 = Normal  
2 = BNL  
3 = ANL  
9 = UNK

111. Alkaline Phosphatase

→

a. Preoperative

**Imalkpr**  
(0= None)

□□□□

**Imalkpc**  
Code

□

1 = U/L  
2 = IU/L  
3 = U  
4 = SI  
8 = Other  
9 = Unknown

**Imalkpd**  
Date

□□-□□-□□

MM DD YY

**Imalkpa**  
Abnormal

□

1 = Normal  
2 = BNL  
3 = ANL  
4 = Noted to  
be abnormal  
9 = UNK

→

112. Amylase

a. Preoperative

**Imamypr**  
(0= None)

□□□□

**Imamypc**  
Code

□

1 = MU/ML  
2 = IU/L  
3 = U/L  
4 = SI  
8 = Other  
9 = Unknown

**Imamypd**  
Date

□□-□□-□□

MM DD YY

**Imamypa**  
Abnormal

□

1 = Normal  
2 = BNL  
3 = ANL  
4 = Noted to  
be abnormal  
9 = UNK



Minnesota PHOS  
Elective Cholecystectomy

→

b. Interim

**Imamyir**  
(0= None)

□□□□

**Imamyic**  
Code

□

1 = MU/ML  
2 = IU/L  
3 = U/L  
4 = SI  
8 = Other  
9 = Unknown

**Imamyid**  
Date

□□-□□-□□

MM DD YY

**Imamyia**  
Abnormal

□

1 = Normal  
2 = BNL  
3 = ANL  
9 = UNK

→

c. Final

**Imamyfr**  
Abnormal

□□□□

**Imamyfc**  
(0= None)

□

1 = MU/ML  
2 = IU/L  
3 = U/L  
4 = SI  
8 = Other  
9 = Unknown

**Imamyfd**  
Code

□□-□□-□□

MM DD YY

**Imamyfa**  
Date

□

1 = Normal  
2 = BNL  
3 = ANL  
9 = UNK

→

113. SGOT/AST (48 hr)

a. Preoperative

**lmsgopr**  
(0= None)

□□□□

**lmsgopc**  
Code

□

1 = U/L  
2 = IU/L  
3 = U  
4 = SI  
8 = Other  
9 = Unknown

**lmsgopd**  
Date

□□-□□-□□

MM DD YY

**lmsgopa**  
Abnormal

□

1 = Normal  
2 = BNL  
3 = ANL  
4 = Noted to  
be abnormal  
9 = UNK

→

b. Interim

**lmsgoir**  
(0= None)

□□□□

**lmsgoic**  
Code

□

1 = U/L  
2 = IU/L  
3 = U  
8 = Other  
9 = Unknown

**lmsgoid**  
Date

□□-□□-□□

MM DD YY

**lmsgoia**  
Abnormal

□

1 = Normal  
2 = BNL  
3 = ANL  
9 = UNK

→

c. Final

**lmsgofr**  
(0= None)

□□□□

**lmsgofc**  
Code

□

1 = U/L  
2 = IU/L  
3 = U  
8 = Other  
9 = Unknown

**lmsgofd**  
Date

□□-□□-□□

MM DD YY

**lmsgofa**  
Abnormal

□

1 = Normal  
2 = BNL  
3 = ANL  
9 = UNK

→

114. SGPT/ALT

a. Preoperative

**lmsgtpr**  
(0= None)

□□□□

**lmsgtpc**  
Code

□

1 = U/L  
2 = IU/L  
3 = U  
4 = SI  
8 = Other  
9 = Unknown

**lmsgtpd**  
Date

□□-□□-□□

MM DD YY

**lmsgtpa**  
Abnormal

□

1 = Normal  
2 = BNL  
3 = ANL  
4 = Noted to  
be abnormal  
9 = UNK





Minnesota PHOS  
Elective Cholecystectomy

→

b. Interim

**lmsgtir**  
(0= None)

□□□□

**lmsgtic**  
Code

□

1 = U/L  
2 = IU/L  
3 = U  
4 = SI  
8 = Other  
9 = Unknown

**lmsgtid**  
Date

□□-□□-□□

M M D D Y Y

**lmsgtia**  
Abnormal

□

1 = Normal  
2 = BNL  
3 = ANL  
9 = UNK

→

c. Final

**lmsgtfr**  
(0= None)

□□□□

**lmsgtfc**  
Code

□

1 = U/L  
2 = IU/L  
3 = U  
4 = SI  
8 = Other  
9 = Unknown

**lmsgtfd**  
Date

□□-□□-□□

M M D D Y Y

**lmsgtfa**  
Abnormal

□

1 = Normal  
2 = BNL  
3 = ANL  
9 = UNK

→

115. GGT

a. Preoperative

**lmggtpr**  
(0 = None)

□□□□

**lmggtpc**  
Code

□

1 = U/L  
2 = IU/L  
3 = U  
4 = SI  
8 = Other  
9 = Unknown

**lmggtpd**  
Date

□□-□□-□□

M M D D Y Y

**lmggtpa**  
Abnormal

□

1 = Normal  
2 = BNL  
3 = ANL  
4 = Noted to  
be abnormal  
9 = UNK

→

b. Interim

**lmggtir**  
(0= None)

□□□□

**lmggtic**  
Code

□

1 = U/L  
2 = IU/L  
3 = U  
4 = SI  
8 = Other  
9 = Unknown

**lmggtid**  
Date

□□-□□-□□

M M D D Y Y

**lmggtia**  
Abnormal

□

1 = Normal  
2 = BNL  
3 = ANL  
9 = UNK

→

c. Final

**lmggtfr**  
(0= None)

□□□□

**lmggtfc**  
Code

□

1 = U L  
2 = IU/L  
3 = U  
4 = SI  
8 = Other  
9 = Unknown

**lmggtfd**  
Date

□□-□□-□□

M M D D Y Y

**lmggtfa**  
Abnormal

□

1 = Normal  
2 = BNL  
3 = ANL  
9 = UNK

Hematology

116. Hematocrit (HCT)

→

Preoperative

**lhctpr**  
(0 = None)

□□.□%

**lhctpd**  
Date

□□-□□-□□

M M D D Y Y

**lhctpa**  
Abnormal

□

1 = Normal  
2 = BNL  
3 = ANL  
4 = Noted to  
be abnormal  
9 = UNK



Minnesota PHOS  
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117. Hemoglobin (HGB)

→

Preoperative

**lhgbpr**  
(0 = None)

□□.□

**lhgbpc**  
Code

□

1 = GM/DL  
2 = G  
3 = MMOL/L  
8 = Other  
9 = Unknown

**lhgbpd**  
Date

□□-□□-□□

MM DD YY

**lhgbpa**  
Abnormal

□

1 = Normal  
2 = BNL  
3 = ANL  
4 = Noted to  
be Abnormal  
9 = UNK

→

118. WBC

a. Preoperative

**lhwbpr**  
(0 = None)

□□□□□

**lhwbpd**  
Date

□□-□□-□□

MM DD YY

**lhwbpa**  
Abnormal

□

1 = Normal  
2 = BNL  
3 = ANL  
4 = Noted to  
be abnormal  
9 = UNK

→

b. Postoperative

**lhwbcor**  
(0 = None)

□□□□□

**lhwbcod**  
Date

□□-□□-□□

MM DD YY

**lhwbcoa**  
Abnormal

□

1 = Normal  
2 = BNL  
3 = ANL  
9 = UNK

→

c. Final

**lhwbfr**  
(0 = None)

□□□□□

**lhwbfd**  
Date

□□-□□-□□

MM DD YY

**lhwbfa**  
Abnormal

□

1 = Normal  
2 = BNL  
3 = ANL  
9 = UNK

→

119. Prothrombin Time (PT)

Preoperative

**lhptpr**  
(0 = None)

□□.□□

**lhptpd**  
Date

□□-□□-□□

MM DD YY

**lhptpa**  
Abnormal

□

1 = Normal  
2 = BNL  
3 = ANL  
4 = Noted to  
be abnormal  
9 = UNK

120. Partial thromboplastin time (PTT)

→

Preoperative

**lhptpr**  
(0 = None)

□□.□

**lhptpd**  
Date

□□-□□-□□

MM DD YY

**lhptpa**  
Abnormal

□

1 = Normal  
2 = BNL  
3 = ANL  
4 = Noted to  
be abnormal  
9 = UNK





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Elective Cholecystectomy

Urinalysis

121. WBC

→

a. Preoperative

rwbcpr

0 = Not done  
1 = Negative  
2 = Positive  
9 = Unknown

rwbcpd

--

MM DD YY

→

b. Interim

rwbcor

0 = Not done  
1 = Negative  
2 = Positive  
9 = Unknown

rwbcod

--

MM DD YY

→

c. Final

rwbcfr

0 = Not done  
1 = Negative  
2 = Positive  
9 = Unknown

rwbcfd

--

MM DD YY

122. Bacteria

→

a. Postoperative

rbacor

0 = Not done  
1 = Negative  
2 = Positive  
9 = Unknown

rbacod

--

MM DD YY

→

b. Final

rbacfr

0 = Not done  
1 = Negative  
2 = Positive  
9 = Unknown

rbacfd

--

MM DD YY

Microbiology

123. Abscess

→

a. Postoperative

bcessor

0 = No Culture  
1 = No Growth  
2 = Positive  
3 = Contaminant  
9 = Unknown

bcessod

--

MM DD YY

→

b. Final

bcessfr

0 = No Culture  
1 = No Growth  
2 = Positive  
3 = Contaminant  
9 = Unknown

bcessfd

--

MM DD YY

124. Blood

→

a. Postoperative

bblor

0 = No Culture  
1 = No Growth  
2 = Positive  
3 = Contaminant  
9 = Unknown

bblod

--

MM DD YY



Minnesota PHOS  
Elective Cholecystectomy

→

b. Final

**bblfr**

0 = No Culture  
1 = No Growth  
2 = Positive  
3 = Contaminant  
9 = Unknown

**bblfd**

--

MM DD YY

→

125. Sputum

a. Postoperative

**bsputor**

0 = No Culture  
1 = No Growth  
2 = Positive  
3 = Contaminant  
9 = Unknown

**bsputod**

--

MM DD YY

→

b. Final

**bsputfr**

0 = No Culture  
1 = No Growth  
2 = Positive  
3 = Contaminant  
9 = Unknown

**bsputfd**

--

MM DD YY

→

126. Urine

a. Postoperative

**burinor**

0 = No Culture  
1 = < 100,000  
2 = ≥ 100,000  
3 = Contaminant  
8 = No Growth  
9 = Unknown

**burinod**

--

MM DD YY

→

b. Final

**burinfr**

0 = No Culture  
1 = < 100,000  
2 = ≥ 100,000  
3 = Contaminant  
8 = No Growth  
9 = Unknown

**burinfid**

--

MM DD YY

→

127. Wound

a. Intraoperative

**bwndir**

0 = No Culture  
1 = No Growth  
2 = Positive  
3 = Contaminant  
9 = Unknown

**bwndid**

--

MM DD YY

→

b. Postoperative

**bwndor**

0 = No Culture  
1 = No Growth  
2 = Positive  
3 = Contaminant  
9 = Unknown

**bwndod**

--

MM DD YY

→

c. Final

**bwndfr**

0 = No Culture  
1 = No Growth  
2 = Positive  
3 = Contaminant  
9 = Unknown

**bwndfd**

--

MM DD YY





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Elective Cholecystectomy

128. Peritoneal Fluid

→

a. Postoperative

**bfludor**

☐

0 = No Culture  
1 = No Growth  
2 = Positive  
3 = Contaminant  
9 = Unknown

**bfludod**

--

MM DD YY

→

b. Final

**bfludfr**

☐

0 = No Culture  
1 = No Growth  
2 = Positive  
3 = Contaminant  
9 = Unknown

**bfludfd**

--

MM DD YY

129. Gallbladder

→

Intraoperative

**bgbir**

☐

0 = No Culture  
1 = No Growth  
2 = Positive  
3 = Contaminant  
9 = Unknown

**bgbid**

--

MM DD YY

DIAGNOSTIC TESTS

Preoperative Chest X-ray

dpcht 130. Chest X-ray

☐

0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN" skip to #131.

If answer is "YES", complete this section.

Date

dpchtd

a. Date.

--

MM DD YY

dpchtn

b. Normal

☐

0 = No  
1 = Yes  
9 = Unknown

If answer is "YES" or "UNKNOWN", skip to #131.

If answer is "NO" complete this section.

dpchti

c. Infiltrate

☐

0 = No  
1 = Yes  
9 = Unknown

dpchtpf

d. Pleural Effusion

☐

0 = No  
1 = Yes  
9 = Unknown



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dpchtpn e. Pneumothorax ☐ 0 = No  
 1 = Yes  
 9 = Unknown

dpchtpe f. Pulmonary Edema ☐ 0 = No  
 1 = Yes  
 9 = Unknown

dpchtat g. Atelectasis ☐ 0 = No  
 1 = Yes  
 9 = Unknown

dpchthf h. Congestive Heart Failure ☐ 0 = No  
 1 = Yes  
 9 = Unknown

Preoperative Upper GI

dpgi 131. Upper GI ☐ 0 = No  
 1 = Yes  
 9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #132.  
 If answer is "YES", continue with this section.

dpgin a. Normal ☐ 0 = No  
 1 = Yes  
 9 = Unknown

If answer is "YES" or "UNKNOWN", skip to #132.  
 If answer is "NO" continue with this section.

dpgisgb b. Gallstones in GB ☐ 0 = No  
 1 = Yes  
 9 = Unknown

dpgisdu c. Gallstones in Bile Duct ☐ 0 = No  
 1 = Yes  
 9 = Unknown

dpgisun d. Gallstones, Location Unspecified ☐ 0 = No  
 1 = Yes  
 9 = Unknown

dpgislu e. Sludge ☐ 0 = No  
 1 = Yes  
 9 = Unknown



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dpginon f. Nonvisualization ☐ 0 = No  
 1 = Yes  
 9 = Unknown

dpgiwal g. Thickened Wall ☐ 0 = No  
 1 = Yes  
 9 = Unknown

dpginnf h. Non-functional Gallbladder ☐ 0 = No  
 1 = Yes  
 9 = Unknown

dpgioth i. Other Findings ☐ 0 = No  
 1 = Yes  
 9 = Unknown

Preoperative Barium Enema/Swallow

dpbaen 132. Barium Enema ☐ 0 = No  
 1 = Yes  
 9 = Unknown

dpbasw 133. Barium Swallow ☐ 0 = No  
 1 = Yes  
 9 = Unknown

Preoperative Gallbladder/Cholecystogram

dpgbm 134. Gallbladder/Cholecystogram ☐ 0 = No  
 1 = Yes  
 9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #135.  
 If answer is "YES", continue with this section.

dpgbn a. Normal ☐ 0 = No  
 1 = Yes  
 9 = Unknown

If answer is "YES" or "UNKNOWN", skip to #135.  
 If answer is "NO" continue with this section.

dpgbsgb b. Gallstones in GB ☐ 0 = No  
 1 = Yes  
 9 = Unknown

dpghsdu c. Gallstones in Bile Duct ☐ 0 = No  
 1 = Yes  
 9 = Unknown





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dpgbun d. Gallstones, Location Unspecified ☐ 0 = No  
1 = Yes  
9 = Unknown

dpgbslu e. Sludge ☐ 0 = No  
1 = Yes  
9 = Unknown

dpgbnon f. Nonvisualization ☐ 0 = No  
1 = Yes  
9 = Unknown

dpgbwal g. Thickened Wall ☐ 0 = No  
1 = Yes  
9 = Unknown

dpgbnnf h. Non-functional Gallbladder ☐ 0 = No  
1 = Yes  
9 = Unknown

dpgbboth i. Other Findings ☐ 0 = No  
1 = Yes  
9 = Unknown

Flat Plate

dpflat 135. Flat Plate Performed ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #136.  
If answer is "YES", continue with this section.

dpflatn a. Normal ☐ 0 = No  
1 = Yes  
9 = Unknown

KUB/Abdominal X-ray

dpkub 136. KUB/Abdominal X-ray Performed ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #137.  
If answer is "YES", continue with this section.



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Elective Cholecystectomy

dpkubn      a. Normal      ☐      0 = No  
1 = Yes  
9 = Unknown

Preoperative Ultrasound - Gallbladder

dpugb 137.    Preoperative Ultrasound -      ☐      0 = No  
Gallbladder      1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #138.  
If answer is "YES", continue with this section.

dpugbn      a.      Normal      ☐      0 = No  
1 = Yes  
9 = Unknown

If answer is "YES" or "UNKNOWN", skip to #138.  
If answer is "NO" continue with this section.

dpugsgb      b.      Gallstones in GB      ☐      0 = No  
1 = Yes  
9 = Unknown

dpugsdu      c.      Gallstones in Bile Duct      ☐      0 = No  
1 = Yes  
9 = Unknown

dpugsun      d.      Abdomen, Gallstones      ☐      0 = No  
Location Unspecified      1 = Yes  
9 = Unknown

dpugslu      e.      Sludge      ☐      0 = No  
1 = Yes  
9 = Unknown

dpugnon      f.      Nonvisualization      ☐      0 = No  
1 = Yes  
9 = Unknown

dpugwal      g.      Thickened Wall      ☐      0 = No  
1 = Yes  
9 = Unknown

dpugmas      h.      Abdomen Abnormal Mass-      ☐      0 = No  
Solid/Cystic      1 = Yes  
9 = Unknown



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dpugbdb i. Abdomen: Dilated Bile duct ☐ 0 = No  
1 = Yes  
9 = Unknown

dpugoth j. Other Finding ☐ 0 = No  
1 = Yes  
9 = Unknown

### Preoperative CAT Scan - Chest, Body

<b>dpctcb</b>	<b>138.</b>	<b>Preoperative CAT Scan -</b>	<input type="checkbox"/>	0 = No
		<b>Chest Body</b>		1 = Yes
				9 = Unknown

If answer is “NO” or “UNKNOWN”, skip to Question #139.  
If answer is “YES”, continue with this section.

dpcn	a.	Normal		0 = No 1 = Yes 9 = Unknown
------	----	--------	--	----------------------------------

If answer is “YES” or “UNKNOWN”, skip to #139.  
If answer is “NO” continue with this section.

<b>dpctsgb</b>	<b>b.</b>	<b>Gallstones in GB</b>	<input type="checkbox"/>	0 = No
				1 = Yes
				9 = Unknown

**dpctsd**

c. Gallstones in Bile Duct ☐ 0 = No  
1 = Yes  
9 = Unknown

**dpctslu**

d. Sludge ☐

0 = No  
1 = Yes  
9 = Unknown

**dpctnon** e. Nonvisualization ☐ 0 = No  
1 = Yes  
9 = Unknown

**dpctwal** f. Thickened Wall ☐ 0 = No  
1 = Yes  
9 = Unknown

dpcloth		g.	Other Finding	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
---------	--	----	---------------	--------------------------	----------------------------------





Postoperative CAT Scan - Chest, Body

doct 139. Postoperative CAT Scan - ☐ 0 = No  
Chest/Body 1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #140.  
If answer is "YES", continue with this section.

doctn a. Normal ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "YES" or "UNKNOWN", skip to #140.  
If answer is "NO" continue with this section.

docti b. Chest: Infiltrate ☐ 0 = No  
1 = Yes  
9 = Unknown

doctpf c. Chest: Pleural Effusion ☐ 0 = No  
1 = Yes  
9 = Unknown

doctpm d. Chest: Pulmonary Embolism ☐ 0 = No  
1 = Yes  
9 = Unknown

Nuclear Medicine/Hepatobiliary Scan

nmp 140. Preoperative Nuclear Medicine ☐ 0 = No  
Hepatobiliary Scan 1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #141.  
If answer is "YES", continue with this section.

nmpn a. Normal ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "YES" or "UNKNOWN", skip to #141.  
If answer is "NO" continue with this section.



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- |         |    |                         |                          |                                  |
|---------|----|-------------------------|--------------------------|----------------------------------|
| nmpsbg  | b. | Gallstones in GB        | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown |
| nmpsdu  | c. | Gallstones in Bile Duct | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown |
| nmpslu  | d. | Sludge                  | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown |
| nmpnon  | e. | Nonvisualization        | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown |
| nmpwal  | f. | Thickened Wall          | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown |
| nmpleak | g. | Bile Leak               | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown |
| nmpob   | h. | Obstruction             | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown |
| nmpoth  | i. | Other Finding           | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown |

Endoscopy

- |     |      |  |                          |                                  |
|-----|------|--|--------------------------|----------------------------------|
| enp | 141. | ENDOSCOPY Preoperative Upper<br>Lower/GI Endoscopy | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown |
|-----|------|--|--------------------------|----------------------------------|

If answer is "NO" or "UNKNOWN", skip to Question #142.  
 If answer is "YES", continue with this section.

- |         |    |        |                          |   |
|---------|----|--------|--------------------------|---|
| enptype | a. | Type:  | <input type="checkbox"/> | 1 = Upper<br>2 = Lower<br>3 = Both<br>9 = Unknown |
| enpn    | b. | Normal | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown                  |

If answer is "YES" or "UNKNOWN", skip to #142.



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If answer is "NO" continue with this section.

enpsgb c. Gallstone in GB ☐ 0 = No  
1 = Yes  
9 = Unknown

enpsdu d. Gallstone in Bile Duct ☐ 0 = No  
1 = Yes  
9 = Unknown

enpslu e. Sludge ☐ 0 = No  
1 = Yes  
9 = Unknown

enpnnon f. Non-visualization ☐ 0 = No  
1 = Yes  
9 = Unknown

enpoth g. Other Findings ☐ 0 = No  
1 = Yes  
9 = Unknown

erpp 142. ERCP Preoperative ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #143.  
If answer is "YES", continue with this section.

erpn a. Normal ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "YES" or "UNKNOWN", skip to #142(j).  
If answer is "NO" continue with this section.

erpsgb b. Gallstones in GB ☐ 0 = No  
1 = Yes  
9 = Unknown

erpsdu c. Gallstones in Bile Duct ☐ 0 = No  
1 = Yes  
9 = Unknown

erpslu d. Sludge ☐ 0 = No  
1 = Yes  
9 = Unknown

erpnnon e. Nonvisualization ☐ 0 = No  
1 = Yes  
9 = Unknown





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erpwal	f.	Thickened Wall	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown	
erpdb	g.	Bile Duct Stricture	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown	
erpoth	h.	Other Findings	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown	
erpsr	i.	Stone Retrieval	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown	
erpar	j.	Anesthetic Risk	<input type="checkbox"/>	1 = Class 1 2 = Class 2 3 = Class 3 4 = Class 4 5 = Class 5 9 = Unknown	1E = Class 1 Emerg 2E = Class 2 Emerg 3E = Class 3 Emerg 4E = Class 4 Emerg 5E = Class 5 Emerg
erpatyp	k.	Anesthesia Type:	<input type="checkbox"/>	0 = none 1 = General 2 = Spinal 3 = Epidural 4 = IV Sedation 5 = Local/Regional 9 = Unknown	
	l.	Pathology findings:			
erptis	(1)	Tissue Removed	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown	
<p>If answer is "YES" continue with this section. If answer is "NO" or "UNKNOWN", skip to #143.</p>					
erpinfl	(2)	Inflammation	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown	
erpinfc	(3)	Infection	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown	
erpntis	(4)	Normal Tissue	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown	



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erpbtis (5) Benign Tissue Change ☐ 0 = No  
 1 = Yes  
 9 = Unknown

erpmntis (6) Malignant Tissue ☐ 0 = No  
 1 = Yes  
 9 = Unknown

erpltum (7) Localized Tumor ☐ 0 = No  
 1 = Yes  
 9 = Unknown

erplext (8) Localized Extension of Tumor ☐ 0 = No  
 1 = Yes  
 9 = Unknown

erpinvt (9) Invasive/ Disseminated Tumor ☐ 0 = No  
 1 = Yes  
 9 = Unknown

erpatho (10) Other Findings ☐ 0 = No  
 1 = Yes  
 9 = Unknown

erpathr (11) Pathology Report ☐ 0 = No  
 1 = Yes  
 9 = Unknown

ero 143. ERCP Postoperative ☐ 0 = No  
 1 = Yes  
 9 = Unknown

If "NO" or "UNKNOWN", skip to Question #144.  
 If "YES", continue.

eron a. Normal ☐ 0 = No  
 1 = Yes  
 9 = Unknown

If answer is "YES" or "UNKNOWN", skip to #143(i).  
 If answer is "NO" continue with this section.

erosgb b. Gallstones in GB ☐ 0 = No  
 1 = Yes  
 9 = Unknown

erosdu c. Gallstones in Bile Duct ☐ 0 = No  
 1 = Yes  
 9 = Unknown



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eroslu	d.	Sludge	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown	
eronon	e.	Nonvisualization	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown	
erowal	f.	Thickened Wall	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown	
erobds	g.	Bile Duct Stricture	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown	
erooth	h.	Other Findings	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown	
eroar	i.	Anesthetic Risk	<input type="checkbox"/>	1 = Class 1 2 = Class 2 3 = Class 3 4 = Class 4 5 = Class 5 9 = Unknown	1E = Class 1 Emerg 2E = Class 2 Emerg 3E = Class 3 Emerg 4E = Class 4 Emerg 5E = Class 5 Emerg
eroatyp	j.	Anesthesia Type:	<input type="checkbox"/>	0 = none 1 = General 2 = Spinal 3 = Epidural 4 = IV Sedation 5 = Local/Regional 9 = Unknown	
	k.	Pathology findings:			
erotis	(1)	Tissue Removed	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown	

If answer is "YES" continue with this section.  
If answer is "NO" or "UNKNOWN", skip to #144.

eroinfl	(2)	Inflammation	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown	
eroinflc	(3)	Infection	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown	
erontis	(4)	Normal Tissue	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown	





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- |         |      |   |                          |                                  |
|---------|------|---|--------------------------|----------------------------------|
| erobtis | (5)  | Benign Tissue Change                    | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown |
| eromtis | (6)  | Malignant Tissue                        | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown |
| eroltum | (7)  | Localized Tumor                         | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown |
| erolext | (8)  | Localized Extension of Tumor            | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown |
| eroinvt | (9)  | Invasive/ Disseminated Tumor            | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown |
| eroth   | (10) | Other Findings                          | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown |
| eropthr | (11) | Pathology Report                        | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown |
| pcpm    | 144. | Preoperative Percutaneous Cholangiogram | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown |

If answer is "NO" or "UNKNOWN", skip to Question #145.  
If answer is "YES", continue with this section.

- |      |    |        |                          |                                  |
|------|----|--------|--------------------------|----------------------------------|
| pcpn | a. | Normal | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown |
|------|----|--------|--------------------------|----------------------------------|

If answer is "YES" or "UNKNOWN", skip to #145.  
If answer is "NO" continue with this section.

- |        |    |                  |                          |                                  |
|--------|----|------------------|--------------------------|----------------------------------|
| pcpsgb | b. | Gallstones in GB | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown |
|--------|----|------------------|--------------------------|----------------------------------|

- |        |    |                         |                          |                                  |
|--------|----|-------------------------|--------------------------|----------------------------------|
| pcpsdu | c. | Gallstones in Bile Duct | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown |
|--------|----|-------------------------|--------------------------|----------------------------------|



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pcpslu d. Sludge ☐ 0 = No  
1 = Yes  
9 = Unknown

pcpnon e. Nonvisualization ☐ 0 = No  
1 = Yes  
9 = Unknown

pcpwal f. Thickened Wall ☐ 0 = No  
1 = Yes  
9 = Unknown

pcpoth g. Other Findings ☐ 0 = No  
1 = Yes  
9 = Unknown

x 145. Test Unspecified ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #146.  
If answer is "YES", continue with this section.

xn a. Normal ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "YES" or "UNKNOWN", skip to #146.  
If answer is "NO" continue with this section.

xsgb b. Gallstones in GB ☐ 0 = No  
1 = Yes  
9 = Unknown

xsdu c. Gallstones in Bile Duct ☐ 0 = No  
1 = Yes  
9 = Unknown

xslu d. Sludge ☐ 0 = No  
1 = Yes  
9 = Unknown

xnon e. Nonvisualization ☐ 0 = No  
1 = Yes  
9 = Unknown

xwal f. Thickened Wall ☐ 0 = No  
1 = Yes  
9 = Unknown









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epbtis	(5)	Benign Tissue Change	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
epmtis	(6)	Malignant Tissue	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
epltum	(7)	Localized Tumor	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
eplext	(8)	Localized Extension of Tumor	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
epinv	(9)	Invasive/ Disseminated Tumor	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
epcirr	(10)	Cirrhosis	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
epperi	(11)	Peritonitis	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
epprfgb	(12)	Perforation of Gall Bladder	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
epprfbo	(13)	Perforation of Bowel	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
epoth	(14)	Other Findings	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #145g(15).  
If answer is "YES", continue with this section.

epothsp Specify: \_\_\_\_\_

eppath	(15)	Pathology Report	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
--------	------	------------------	--------------------------	----------------------------------

h. Operative Information:

epshbp	(1)	High Blood Pressure:	<input type="text"/> <input type="text"/> <input type="text"/>	mm Systolic
--------	-----	----------------------	--	-------------



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epdhbp			<input type="text"/> <input type="text"/> <input type="text"/> mm Diastolic
epsibp	(2)	Low Blood Pressure:	<input type="text"/> <input type="text"/> <input type="text"/> mm Systolic
epdlbp			<input type="text"/> <input type="text"/> <input type="text"/> mm Diastolic
epblos	i.	Estimated Blood Loss:	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> cc's
epchprf	j.	Cholangiogram Performed	<input type="checkbox"/> 0 = No 1 = Yes 9 = Unknown
epduprf	k.	Duodenotomy Performed	<input type="checkbox"/> 0 = No 1 = Yes 9 = Unknown
epappen	l.	Appendectomy	<input type="checkbox"/> 0 = No 1 = Yes 9 = Unknown
epspprf	m.	Sphincteroplasty Performed	<input type="checkbox"/> 0 = No 1 = Yes 9 = Unknown
eprepdu	n.	Repair of Common Bile Duct Stricture	<input type="checkbox"/> 0 = No 1 = Yes 9 = Unknown
epchduo	o.	Choledochoduodenostomy Performed	<input type="checkbox"/> 0 = No 1 = Yes 9 = Unknown
epchjej	p.	Choledochojejunostomy Performed	<input type="checkbox"/> 0 = No 1 = Yes 9 = Unknown
epiercp	q.	Intraoperative ERCP Performed	<input type="checkbox"/> 0 = No 1 = Yes 9 = Unknown
epcbdu	r.	Common Bile Duct Exploration	<input type="checkbox"/> 0 = No 1 = Yes 9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #147.  
If answer is "YES", continue with this section.



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epxpsco (1) Choledochoscope Used ☐ 0 = No  
1 = Yes  
9 = Unknown

epxpdu (2) Stones Found in Bile Duct ☐ 0 = No  
1 = Yes  
9 = Unknown

epxptt (3) T-tube Used ☐ 0 = No  
1 = Yes  
9 = Unknown

epxpoth (4) Other Bile Duct Tube Used ☐ 0 = No  
1 = Yes  
9 = Unknown

Surgical Approach

147. Procedure Type:

so a. Open ☐ 0 = No  
1 = Yes  
9 = Unknown

smlap b. Mini-Laparotomy ☐ 0 = No  
1 = Yes  
9 = Unknown

scon c. Conversion ☐ 0 = No  
1 = Yes  
9 = Unknown

slapcy d. Laparoscopy-Cautery ☐ 0 = No  
1 = Yes  
9 = Unknown

slaplz e. Laparoscopy-Laser ☐ 0 = No  
1 = Yes  
9 = Unknown

OPERATIVE ADVERSE OCCURRENCES

yoc 148. Operative Adverse Occurrences ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #149.  
If answer is "YES", continue with this section.



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yami	a.	AMI	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
yra	b.	Respiratory Arrest	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
ysusar	c.	Sustained Arrhythmia	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
ycastr	d.	Cardiac Arrest	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
yhth	e.	Hyperthermia	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
yseiz	f.	Seizure	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
ystroke	g.	Stroke	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
yblshk	h.	Uncontrolled Bleeding or Shock	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
yioi	i.	Inability to Insufflate	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
yiggbw	j.	Inability to Grasp the GB Wall	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
ylaorta	k.	Laceration of the Aorta	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
ylhepa	l.	Laceration of the Hepatic Artery	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
ylaser	m.	Laser Destruction of Portal Vein	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown





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yldu n. Laceration of the Bile Duct ☐ 0 = No  
1 = Yes  
9 = Unknown

yboinj o. Bowel Injury ☐ 0 = No  
1 = Yes  
9 = Unknown

yteargb p. Tear of Gallbladder ☐ 0 = No  
1 = Yes  
9 = Unknown

yspill q. Stone Spillage ☐ 0 = No  
1 = Yes  
9 = Unknown

ylliver r. Liver Laceration ☐ 0 = No  
1 = Yes  
9 = Unknown

yoth s. Other Adverse Occurrence ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #150.  
If answer is "YES", continue with this section.

yoths Specify:

TREATMENT INTERVENTIONS

toemb 149. Postoperative Embolic Prophylaxis ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #150.  
If answer is "YES", continue with this section.

tohep a. Heparin ☐ 0 = No  
1 = Yes  
9 = Unknown

tocoum b. Coumadin ☐ 0 = No  
1 = Yes  
9 = Unknown

toasa c. ASA ☐ 0 = No  
1 = Yes  
9 = Unknown



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**tocpm**

d. CPM

☐ 0 = No  
☐ 1 = Yes  
☐ 9 = Unknown

toteds	e.	TEDS	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
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tooth	f.	Other		0 = No 1 = Yes 9 = Unknown
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If answer is “**NO**” or “**UNKNOWN**”, skip to Question #150.  
If answer is “**YES**”, continue with this section.

toothsp Specify:

<b>tospiro</b>	150.	Incentive Spirometer	<input type="checkbox"/>	0 = No
				1 = Yes
				2 = Refused
				9 = Unknown

<b>toblprd</b>	<b>151.</b>	<b>Blood Products</b>	<input type="checkbox"/>	0 = No
				1 = Yes
				2 = Refused
				9 = Unknown

If answer is “**NO**”, “**UNKNOWN**”, or “**REFUSED**”, skip to question #152.  
If answer is “**YES**”, complete this section.

<b>toblaut</b>	a.	Autologous	<input type="checkbox"/>	0 = No
				1 = Yes
				9 = Unknown

<b>toblhom</b>	b.	Homologous	<input type="checkbox"/>	0 = No
				1 = Yes
				9 = Unknown

toblrbc	c.	RBCs		0 = No 1 = Yes 9 = Unknown
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tblwbl	d.	Whole Blood	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
--------	----	-------------	--------------------------	----------------------------------

tobplat	e.	Platelets/Platelet Concentrate	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
---------	----	--------------------------------	--------------------------	----------------------------------

<b>toblfpp</b>	f.	Fresh Frozen Plasma	<input type="checkbox"/>	0 = No
				1 = Yes
				9 = Unknown



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toblsav g. Cell Saver ☐ 0 = No  
1 = Yes  
9 = Unknown

PRESCRIBED MEDS

mantd 152. Initial Antibiotic Dose --  
MM DD YY

mpant 153. Preoperative Antibiotics ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #154.  
If answer is "YES", continue. with this section.

mpant1 a. Antibiotic # 1  (0 = None)

mpt1 b. Time of Admin. # 1 ☐ 1 = ≤24 hrs  
2 = >24 - ≤36 hrs  
3 = >36 - ≤48 hrs  
4 = >48 - ≤72 hrs  
5 = >72 hours  
9 = unknown

mpant2 c. Antibiotic # 2  (0 = None)

If answer is "0", skip to 153e.

mpt2 d. Time of Admin. # 2 ☐ 1 = ≤24 hrs  
2 = >24 - ≤36 hrs  
3 = >36 - ≤48 hrs  
4 = >48 - ≤72 hrs  
5 = >72 hours  
9 = unknown

mpant3 e. Antibiotic # 3  (0 = None)

If answer is "0", skip to 154.

mpt3 f. Time of Admin. # 3 ☐ 1 = ≤24 hrs  
2 = >24 - ≤36 hrs  
3 = >36 - ≤48 hrs  
4 = >48 - ≤72 hrs  
5 = >72 hours  
9 = unknown

miant 154. Intraoperative Antibiotics ☐ 0 = No  
1 = Yes  
9 = Unknown





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If answer is "NO" or "UNKNOWN", skip to Question #155.  
If answer is "YES", continue. with this section.

miant1 a. Antibiotics #1  (0 = None)

miant2 b. Antibiotics #2  (0 = None)

miant3 c. Antibiotics #3  (0 = None)

moant 155. Postoperative Antibiotics  0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #156.  
If answer is "YES", continue. with this section.

moant1 a. Antibiotic # 1  (0 = None)

mot1 b. Time of Admin. #1  1 = ≤24 hrs  
2 = >24 - ≤36 hrs  
3 = >36 - ≤48 hrs  
4 = >48 - ≤72 hrs  
5 = >72 hours  
9 = Unknown

moant2 c. Antibiotic # 2  (0 = None)

If answer is "0", skip to 155e.

mot2 d. Time of Admin. #2  1 = ≤24 hrs  
2 = >24 - ≤36 hrs  
3 = >36 - ≤48 hrs  
4 = >48 - ≤72 hrs  
5 = >72 hours  
9 = unknown

moant3 e. Antibiotic # 3  (0 = None)

If answer is "0", skip to 156.

mot3 f. Time of Admin. #3  1 = ≤24 hrs  
2 = >24 - ≤36 hrs  
3 = >36 - ≤48 hrs  
4 = >48 - ≤72 hrs  
5 = >72 hours  
9 = unknown



**moadv** 156. Adverse Reaction to Medication ☐ 0 = No  
1 = Yes  
9 = Unknown

## POSTOPERATIVE COMPLICATIONS

### General Postoperative Complications

**zoany** 157. Postoperative Complications ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #158.  
If answer is "YES", continue with this section.

**zoarest** a. Cardiac Arrest ☐ 0 = No  
1 = Yes  
9 = Unknown

**zoshock** b. Shock ☐ 0 = No  
1 = Yes  
9 = Unknown

**zodvt** c. Deep Vein Thrombosis ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #157d.  
If answer is "YES", continue with this section.

**zodvtex** (1) Indicate extremity: ☐ 1 = Right  
2 = Left  
3 = Both  
9 = Unknown

**zoosbl** d. Operative Site Bleeding ☐ 0 = No  
1 = Yes  
9 = Unknown

**zoblocc** e. GI. Hemorrhage, Occult  
Blood Guaiac + Stool ☐ 0 = No  
1 = Yes  
9 = Unknown

**zoblmod** f. GI Hemorrhage, Moderate  
Bleeding ☐ 0 = No  
1 = Yes  
9 = Unknown



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<b>zoblmas</b>	<b>g.</b>	GI Hemorrhage, Massive bleeding	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zope</b>	<b>h.</b>	Pulmonary Edema	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zopemb</b>	<b>i.</b>	Pulmonary Embolism	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zowound</b>	<b>j.</b>	Wound Infection/Abscess	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zowfail</b>	<b>k.</b>	Wound Failure (partial or or complete)	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zoat</b>	<b>l.</b>	Atelectasis	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zohema</b>	<b>m.</b>	Hematoma at Operative Site	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zomi</b>	<b>n.</b>	Myocardial Infarction	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zocva</b>	<b>o.</b>	CVA	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zopn</b>	<b>p.</b>	Pneumonia	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zoresf</b>	<b>q.</b>	Respiratory Failure	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zorret</b>	<b>r.</b>	Urinary Retention	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown



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zoarrhy

s.

Arrhythmias

☐

0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #157t.  
If answer is "YES", continue with this section.

zosvt

(1)

Sustained Ventricular  
Tachycardia

☐

0 = No  
1 = Yes  
9 = Unknown

zohb2

(2)

Heart Block, 2nd Degree

☐

0 = No  
1 = Yes  
9 = Unknown

zohb3

(3)

Heart Block, 3rd degree

☐

0 = No  
1 = Yes  
9 = Unknown

zosa

(4)

Supraventricular  
Arrhythmia

☐

0 = No  
1 = Yes  
9 = Unknown

zova

(5)

Ventricular Arrhythmia

☐

0 = No  
1 = Yes  
9 = Unknown

zosnd

(6)

Sinus Node Dysfunction

☐

0 = No  
1 = Yes  
9 = Unknown

zonbt

(7)

Nonmalignant Bradycardia or  
Tachyarrhythmia

☐

0 = No  
1 = Yes  
9 = Unknown

zocomat

t.

Coma

☐

0 = No  
1 = Yes  
9 = Unknown

zoulcer

u.

Gastric Stress Ulcer

☐

0 = No  
1 = Yes  
9 = Unknown

zoneuro

v.

Neuropathy

☐

0 = No  
1 = Yes  
9 = Unknown





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<b>zobact</b>	w.	Bacteremia	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zochf</b>	x.	CHF	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zouti</b>	y.	UTI	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zointub</b>	z.	Intubation GT or EQ to 24 hours	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zodeath</b>	aa.	Death	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zorenf</b>	bb.	Renal Failure	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zoatn</b>	cc.	ATN not Requiring Dialysis (Creatinine > 1.0 over baseline)	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zoinfc</b>	dd.	Infection> 72 Hours After Admission	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zotemp</b>	ee.	Temperature > 38.5° C or 101.3° F	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zoantig</b>	ff.	Antibiotics Given	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zooth</b>	gg.	Other	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #158.  
 If answer is "YES", continue with this section.

**zooths** Please Specify: \_\_\_\_\_



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Postoperative GI Complications:

**zagic** 158. Postoperative GI Complications ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to #159.

If answer is "YES", complete this section.

**zogipan** a. Pancreatitis ☐ 0 = No  
1 = Yes  
9 = Unknown

**zogijau** b. Jaundice ☐ 0 = No  
1 = Yes  
9 = Unknown

**zogirs** c. Retained Stones ☐ 0 = No  
1 = Yes  
9 = Unknown

**zogilek** d. Bile Leakage ☐ 0 = No  
1 = Yes  
9 = Unknown

**zogiabs** e. Intra-Abdominal Abscess ☐ 0 = No  
1 = Yes  
9 = Unknown

**zogibob** f. Biliary Obstruction ☐ 0 = No  
1 = Yes  
9 = Unknown

**zogidis** g. Prolonged Intestinal  
dismotility/Ileus ☐ 0 = No  
1 = Yes  
9 = Unknown

**zoginob** h. Intestinal Obstruction ☐ 0 = No  
1 = Yes  
9 = Unknown

**zogitub** i. T-Tube Dislodgment ☐ 0 = No  
1 = Yes  
9 = Unknown

**zogitbs** j. Traumatic Biliary Stricture ☐ 0 = No  
1 = Yes  
9 = Unknown



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- |                |    |                          |                          |                                  |
|----------------|----|--------------------------|--------------------------|----------------------------------|
| <b>zogistn</b> | k. | Sphincter Stenosis       | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown |
| <b>zogiabb</b> | l. | Intra-Abdominal Bleeding | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown |
| <b>zogibc</b>  | m. | Bile Collections/Biloma  | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown |
| <b>zogishp</b> | n. | Post-op Shoulder Pain    | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown |
| <b>zogiemp</b> | o. | Subcutaneous Emphysema   | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown |
| <b>zogioth</b> | p. | Other                    | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown |

If answer is "NO" or "UNKNOWN", skip to Question #159.  
If answer is "YES", continue with this section.

**zogiots** Specify: \_\_\_\_\_

TRAUMA SUFFERED IN HOSPITAL

- |           |      |                             |                          |                                  |
|-----------|------|-----------------------------|--------------------------|----------------------------------|
| <b>qh</b> | 159. | Trauma suffered in Hospital | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown |
|-----------|------|-----------------------------|--------------------------|----------------------------------|

If answer is "NO" or "UNKNOWN", skip to #160.  
If answer is "YES", complete this section.

- |                |    |                   |                          |                                  |
|----------------|----|-------------------|--------------------------|----------------------------------|
| <b>qulcer</b>  | a. | Decubitus Ulcer   | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown |
| <b>qinjury</b> | b. | Accidental Injury | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown |
| <b>qfall</b>   | c. | Patient Fall      | <input type="checkbox"/> | 0 = No<br>1 = Yes<br>9 = Unknown |





# Minnesota PHOS

## *Elective Cholecystectomy*

1

0 = No  
1 = Yes  
9 = Unknown

If answer is “**NO**” or “**UNKNOWN**”, skip to Question # 160.  
If answer is “**YES**”, continue with this section.

Specify: \_\_\_\_\_

## DISCHARGE STATUS/PLAN

1

0 = No  
1 = Yes  
9 = Unknown

161. Discharge ADL/Continence

7

1 = Continent  
2 = Incontinent  
3 = Dialysis/No urine output  
9 = Inadequate Documentation

7

1 = Continent  
2 = Incontinent  
3 = Bowel Ostomy  
9 = Inadequate Documentation

3

1 = Independent ambulation  
2 = Cane  
3 = Walker  
4 = Wheelchair  
5 = Bedridden  
8 = Other  
9 = Unknown

7

1 = D/C to home  
2 = Transfer to another hosp  
3 = Transfer to swing, SNF, or ICF  
4 = Transfer to Rehab Facility  
5 = Transfer to another institution  
6 = Transfer to HHA  
7 = AMA  
8 = Expired  
9 = Unknown

164. Final Listing of Procedures:

00.00

00.00

□□.□□

00.00



Minnesota PHOS  
*Elective Cholecystectomy*

pr5	5.	□□.□□	_____
pr6	6.	□□.□□	_____
pr7	7.	□□.□□	_____
pr8	8.	□□.□□	_____
pr9	9.	□□.□□	_____
pr10	10.	□□.□□	_____
pr11	11.	□□.□□	_____
pr12	12.	□□.□□	_____
pr13	13.	□□.□□	_____
pr14	14.	□□.□□	_____
pr15	15.	□□.□□	_____

165. Final Listing of Diagnoses:

dx1	1.	□□□.□□	_____
dx2	2.	□□□.□□	_____
dx3	3.	□□□.□□	_____
dx4	4.	□□□.□□	_____
dx5	5.	□□□.□□	_____
dx6	6.	□□□.□□	_____
dx7	7.	□□□.□□	_____
dx8	8.	□□□.□□	_____
dx9	9.	□□□.□□	_____
dx10	10.	□□□.□□	_____
dx11	11.	□□□.□□	_____
dx12	12.	□□□.□□	_____
dx13	13.	□□□.□□	_____
dx14	14.	□□□.□□	_____
dx15	15.	□□□.□□	_____



**COLORADO TRACKING VARIABLES**  
**for CHOLECYSTECTOMY**  
**(not listed on worksheet)**

<b>HICO</b>	'MEDR-VERIFICATION-PRIN PROC MET'
<b>FNO</b>	'MEDR-VERIFICATION-FIRST NAME'
<b>LNO</b>	'MEDR-VERIFICATION-LAST NAME'
<b>HOSPNO</b>	'MEDR-VERIFICATION-HOSPNO'
<b>HOSPADO</b>	'MEDR-VERIFICATION-HOSPADO'
<b>PROVO</b>	'MEDR-VERIFICATION-PROVIDERO'
<b>admitdom</b>	'MEDR-VERIFICATION-ADMIT DATEO MONTH'
<b>admitdod</b>	'MEDR-VERIFICATION-ADMIT DATEO DAY'
<b>admitdoy</b>	'MEDR-VERIFICATION-ADMIT DATEO YEAR'
<b>dcdom</b>	'MEDR-VERIFICATION-DISCHARGE DATEO MONTH'
<b>dodod</b>	'MEDR-VERIFICATION-DISCHARGE DATEO DAY'
<b>dcdoy</b>	'MEDR-VERIFICATION-DISCHARGE DATEO YEAR'
<b>MRO</b>	'MEDR-VERIFICATION-MEDICAL RECORD NO'
<b>EDITSFLA</b>	'MEDR-EDITS FLAG'
<b>selectdm</b>	'MEDR-SELECT DATE MONTH'
<b>selectdd</b>	'MEDR-SELECT DATE DAY'
<b>selectdy</b>	'MEDR-SELECT DATE YEAR'
<b>LASTMODI</b>	'MEDR-LAST MODIFIED'



## **Cholecystectomy**

### **Instructions**



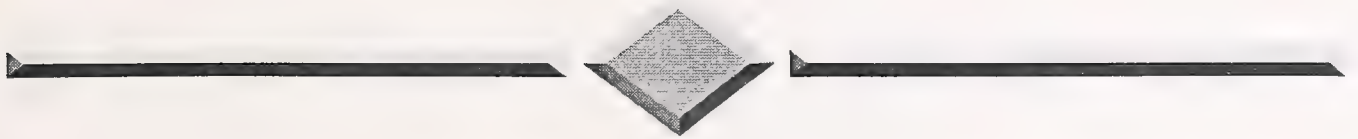




**MINNESOTA PHOS**

**CHOLECYSTECTOMY**

**INSTRUCTIONS**





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# MINNESOTA PHOS

## CHOLECYSTECTOMY

### Instructions

**General Comments:** To minimize movements within the medical record, variables are grouped according to the sections of the medical record (e.g., past medical history, admission orders, etc.) where the data are likely to be found.

Please be sure to answer every question as appropriate.

We trust your judgment as a professional abstractor, but also want data collection to be as consistent as possible. Please contact the Central Office if you have questions during abstraction; this will help us recognize patterns or problems with the abstraction form itself. If you have a question and cannot reach us immediately, complete the rest of the abstraction for that record and set it aside until your question can be answered.

### General Instructions:

- a. Unless otherwise specified, the following order of priority is to be followed when conflicting information is documented in the medical record:
  - 1st priority - physician documentation
  - 2nd priority - laboratory reports if available and appropriate
  - 3rd priority - nurses documentation

- b. Use the following codes to answer questions unless otherwise specified:

0 = "NO"  
1 = "YES"  
9 = "UNKNOWN"

**"NO"** - For abstraction purposes, enter "NO" when there is no documentation of the presence of a disease, condition, sign, symptom, etc.

**"YES"** - Enter "YES" when a disease, condition, sign, symptom, etc., is documented as being present.

**"UNKNOWN"** - Many variables have an "UNKNOWN" option. This option should be abstracted when the medical record contains illegible or insufficient documentation and as a result, the RNRC is unable to make a determination. If you are unable to determine a date, enter 11/11/11.

- c. **History Definition** - For abstraction purposes, any sign, symptom, condition, surgery, etc., which occurred prior to hospital arrival.





## *Cholecystectomy*

- d. **Current/Admission Definition** - For abstraction purposes, any sign, symptom, condition, finding, etc., evident on arrival to hospital or within the first 24 hours of admission.
- e. **NOTE:** All adjectives used as qualifiers and modifiers are to be considered as positive findings unless instructed otherwise in the data collection instrument. All abbreviations are acceptable for abstraction.
- f. If information for any numeric data item is given as a range, abstractor should enter the higher end of the range.

## **PATIENT DEMOGRAPHICS**

- 1. ***PHOS ID Number***
- 2. ***HIC Number:*** Enter the patient's medicare number. If the patient's HIC number does not correspond to the HIC number assigned by Minnesota, notify the Central Office.
- 3. ***Medical Record Number:*** Enter the number of the medical record for this stay. If you are unable to determine the medical record number, enter 9.
- 4. ***Patient Name:*** Enter the name of the patient as follows: First, Last.
- 5. ***Hospital Provider Number***
- 6. ***Hospital Name***
- 7. ***Hospital Address***
- 8. ***Date of admission:*** Please use the MM/DD/YY format. Priority source, the admission facesheet.
- 9. ***Date of discharge:*** Please use the MM/DD/YY format. First priority source is the admission facesheet followed by nursing discharge notes.
- 10. ***Date of Birth:*** Record the patient's date of birth using the MM/DD/YYYY format, including the century (e.g., 1892, 1931, etc.).
- 11. ***Principal Procedure:*** Enter the principal procedure code. If a code is not listed, enter 0.
- 12. ***State:*** Enter the state the patient resides in. Record the two digit abbreviation for the state.

Alabama  
Alaska

AL  
AK

Montana  
Nebraska

MT  
NE



## *Cholecystectomy*

Arizona	AZ	Nevada	NV
Arkansas	AR	New Hampshire	NH
California	CA	New Jersey	NJ
Colorado	CO	New Mexico	NM
Connecticut	CT	New York	NY
Delaware	DE	North Carolina	NC
Dist. of Columbia	DC	North Dakota	ND
Florida	FL	Ohio	OH
Georgia	GA	Oklahoma	OK
Hawaii	HI	Oregon	OR
Idaho	ID	Pennsylvania	PA
Illinois	IL	Rhode Island	RI
Indiana	IN	South Carolina	SC
Iowa	IA	South Dakota	SD
Kansas	KS	Tennessee	TN
Kentucky	KY	Texas	TX
Louisiana	LA	Utah	UT
Maine	ME	Vermont	VT
Maryland	MD	Virginia	VA
Massachusetts	MA	Washington	WA
Michigan	MI	West Virginia	WV
Minnesota	MN	Wisconsin	WI
Mississippi	MS	Wyoming	WY
Missouri	MO		

13. **Gender:** Indicate the patient's gender.

1 = Male  
 2 = Female  
 9 = Unknown (Gender is illegible or cannot be readily determined from the medical record.)

14. **Insurance Type:** Enter the patient's type of insurance. Do not make any assumptions about the type of coverage available. The information must be specifically listed on the admission/facesheet.

1 = Medicaid  
 2 = Medigap (includes BC/BS, AARP, and CHAMPUS)  
 3 = Other (includes but not limited to auto insurance coverage, liability coverage from homeowners, workman's compensation.)  
 4 = No other insurance  
 9 = Inadequate documentation (cannot be readily determined).

15. **Race:** Enter the appropriate code to indicate the patient's race. Acceptable locations for this information in the order of priority are physician documentation, nursing admission documentation, nursing notes, admission/facesheet, EKG report.

1 = White - White (Whi or W) or Caucasian (Cauc, Cau, or Ca).  
 2 = Hispanic - Hispanic (Hisp, His or H), Latin American, Latino, Chicano, Cuban, Mexican, Mexican-American, Puerto Rican, South American, Central American, Spanish or Spanish American.



### *Cholecystectomy*

- 3 = Black - Black (B), Negro, Afro-American, Black African or Black American.
  - 4 = Asian - Asian, Chinese, Asian-American, Filipino, Japanese, Korean, Vietnamese or Oriental.
  - 5 = Native American - Native American, American Indian, Alaskan Native or any recognized tribal entity (e.g., Apache, Sioux, Seminole, etc.).
  - 8 = Other - Race is adequately and clearly documented but does not fit into any of the other categories (e.g., Iranian).
  - 9 = Unknown - Race cannot be readily determined, is not legible or is not addressed.
16. **Re-abstract:** Do not change this option.
17. **Ab Id:** Do not change this option.

### **Record Verification:**

Verify that the medical record selection is appropriate for this study.

Verify the principal procedure. For the CHOLECYSTECTOMY study, the correct principle procedure code is 51.23 (Laparoscopic cholecystectomy) or 51.22 (Open cholecystectomy). If correct, select "YES". If not, select "NO".

If the principal procedure code (51.23 or 51.22) is listed as a secondary procedure code, contact the Central Office for approval to continue with the review. If the principal procedure ICD-9 code is not listed, a HCPC code may be used to verify the procedure. The HCPC codes of 56340-56342 are acceptable. If no valid procedure code (ICD-9 or HCPC) is found, contact the central office for approval to continue with the review.

If approval to proceed is obtained, indicate "YES". If no approval is obtained, indicate "NO" and stop abstraction. Proceed to the next case.

### **USUAL LEVEL OF FUNCTION**

- 18. **Admission Height:** Select 1 to indicate inches, 2 to indicate centimeters or 9 to indicate unknown. If 9 is selected, leave the value field blank. Use the nursing assessment as the first priority.
- 19. **Admission Weight:** Select 1 to indicate pounds, 2 to indicate kilograms or 9 to indicate unknown. If 9 is selected, leave the value field blank. Use the nursing assessment as the first priority.





20. **Bladder Continence:** Select the appropriate code to record the patient's normal level of bladder continence prior to admission. If the patient's continence status changed as a result of the acute illness which prompted this admission, record the continence status immediately prior to the acute illness.
- 1 = Continent: No documentation of urinary incontinence. Bladder continence is considered to be present if documentation indicates stress incontinence.
  - 2 = Incontinent: Patient is incontinent of urine or has a foley catheter, ileo conduit, nephrostomy tube or cystotomy. This option includes patients who perform self-catheterization.
  - 3 = Dialysis/No urine output: Chronic dialysis patient with no urine output.
  - 9 = Inadequate Documentation: Patient's bladder continence cannot be determined.
21. **Bowel Continence:** Select the appropriate code to record the patient's normal level of bowel continence prior to admission. If the patient's continence status changed as a result of the acute illness which prompted this admission, record the continence status immediately prior to the acute illness.
- 1 = Continent: No documentation of bowel incontinence.
  - 2 = Incontinent: Patient is incontinent of stool; this does not include a colostomy or ileostomy.
  - 3 = Bowel Ostomy: Includes patients with a colostomy or ileostomy. For patient's with a colostomy, this option is selected regardless of the patient's ability to control the drainage.
  - 9 = Inadequate Documentation: Patient's bowel continence cannot be determined.
22. **Mobility:** Select the appropriate code to indicate the patient's normal level of mobility before this hospitalization. If the patient's mobility status changed as a result of the acute illness which prompted this admission, record the mobility status immediately prior to the acute illness.
- 1 = Independent Ambulation
  - 2 = Cane
  - 3 = Walker





- 4 = Wheelchair
- 5 = Bedridden
- 8 = Other
- 9 = Unknown

## History of Substance Use

- 23. ***Smoking History:*** Exclude cigars pipes, or chewing tobacco but assume cigarettes if no other form of tobacco is mentioned. The patient is considered to have a smoking history even if he has quit smoking at this time.
- 24. ***Chronic alcohol abusers:*** Patient has alcohol dependence/tolerance/abuse or is a moderate-heavy or binge drinker. Also includes patients whose daily consumption is greater than or equal to 1/2 bottle wine (4 glasses), 3 beers or shots hard liquor or 3 cocktails. Exclude patients clearly described as no longer drinking.

## HISTORY AND PHYSICAL

**NOTE:** All adjectives used as qualifiers and modifiers are to be considered as positive findings unless the specific data element instructions state otherwise. All abbreviations are acceptable for abstraction.

- Physician H&P
- Initial Admission Physician Progress Note
- Initial Admission Physician Consultation H&P/Note
- Physician Emergency Room Notes/Reports
- Discharge Summary

Listed above are the acceptable locations for obtaining the history and physical information. Multiple sources may be used.

## Neurological

### Neurological History

- 25. ***History of Headache:*** Includes migraines, **recurrent** headaches (HA). All qualifiers and modifiers are acceptable.
- 26. ***Cognitive Deficit/Mental Retardation:*** Includes slow learner, Alzheimer's disease or dementia.
- 27. ***History of CVA:*** Includes cerebrovascular accident (CVA), cerebral infarct, brain infarct or a stroke. Does not include TIA or current CVA/TIA.



### *Cholecystectomy*

28. ***CVA known to be hemorrhagic:*** Includes hemorrhagic infarct, CVA known to be hemorrhagic, cerebral hemorrhage or bleeding, hemorrhagic cerebrovascular accident (CVA), intracranial bleeding or hemorrhage, intracerebral bleeding or hemorrhage, ruptured intracranial aneurysm, cerebral occlusion, cerebral thrombosis, hemorrhagic stroke intracranial bleed, ruptured intracranial aneurysm, intracerebral hemorrhage or bleed. **Exclude reversible ischemic neurological deficit (RIND).**

### **Current Neurological Disease**

29. ***Syncope:*** Includes near-syncope, fainting spells, passing out, pre-syncope or blackouts.
30. ***Cerebrovascular Accident/TIA:*** Includes cerebral vascular accident, CVA, stroke or transient ischemic accident (TIA).

### **Cardiovascular**

#### **Cardiac Disease History**

31. ***History of Arrhythmia:***

If "YES", select all applicable descriptions:

- a. = **Sustained Ventricular Tachycardia:** Ventricular tachycardia lasting 10 seconds or more or literal documentation of sustained ventricular tachycardia or sustained V-tach.
- b. = **Heart Block, 2nd degree:** Includes second degree AV block, Wenckebach block, Mobitz type I, Mobitz type II or second degree heart block.
- c. = **Heart Block, 3rd degree:** Includes complete heart block or AV dissociation.
- d. = **Supraventricular Arrhythmia:** Includes SVT, atrial fibrillation, atrial flutter, atrial tachycardia, atrial couplets or paroxysmal atrial tachycardia (PAT).
- e. = **Ventricular Arrhythmia:** Includes frequent multifocal or multiform PVCs, ventricular couplets, bigeminy, ventricular triplets, trigeminy, ventricular tachycardia, runs of ventricular tachycardia, V-tach, salvos or ventricular fibrillation.



- f. = **Sinus Node Dysfunction:** Includes SA block, SA arrest or sick sinus syndrome.
- g. = **Non-malignant bradycardia/tachyarrhythmia:** Includes sinus bradycardia, bradycardia, non-malignant bradycardia, sinus tachycardia, tachycardia or tachyarrhythmia.

32. **Hypertension:** Includes hypertensive heart disease, HTN, renovascular hypertension (portal hypertension), systemic hypertension, elevated blood pressure (BP), a history of high blood pressure (HBP, or an up arrow followed by BP) or any other type of hypertension **except** intraocular or pulmonary.
33. **Angina:** Includes ischemic heart disease, unstable angina, myocardial ischemia, etc.
34. **MI:** Includes one or more myocardial infarctions/injuries (MI or AMI), heart attacks or heart injuries. Reference to ischemia or indeterminate descriptions such as "cannot rule out," "suspicious for," or "possible" would not be considered evidence of a previous MI. Acceptable evidence of an old infarction would include "infarct, age undetermined," "probable MI," or "MI possibly acute." If there is a preadmission or day of admission EKG with a finding of old MI, and it is noted by a physician, record "YES".
35. **Valvular disease:** Includes, but not limited to, mitral or aortic valve disorders.
36. **Congestive Heart Failure:** CHF, pump failure, volume or fluid overload, pulmonary vascular congestion or cardiac decompensation.

### **History of Cardiovascular Surgery**

37. **Coronary Artery Angioplasty:** History of one or more angioplasties, attempted angioplasties, percutaneous transluminal angioplasty (PTCA) or arthroplasties.
38. **CABG:** History of one or more coronary artery bypass grafts (CABGs) or heart/coronary bypass.
39. **Intracardiac (valve, aneurysm):** Includes valve replacement, repair of septal defect, VSD, ASD or repair of aneurysm.
40. **Peripheral vascular surgery:** History of femoral-popliteal bypass, femoral-femoral bypass, embolectomy or varicose vein stripping.





41. ***Chest pain (steady):*** Includes substernal chest pain, chest tightening, chest pressure, chest discomfort, angina, exercise induced chest pain, heaviness, aching, pressure, crushing, squeezing or burning, epigastric or pain radiating to the arms/jaw. Also includes pain attributed to a possible cardiac origin.

**The pain MUST HAVE BECOME EVIDENT within 24 hours before or after admission, but need not be present at admission.**

Do not select this option for chest wall pain or any chest pain not attributed to a cardiac origin (e.g., pleuritic, arthritic or gastrointestinal).

42. ***Current Arrhythmia:***

If "YES", select all applicable descriptions:

- a. = **Sustained Ventricular Tachycardia:** Ventricular tachycardia lasting 10 seconds or more or literal documentation of sustained ventricular tachycardia or sustained V-tach.
- b. = **Heart Block, 2nd degree:** Includes second degree AV block, Wenckebach block, Mobitz type I, Mobitz type II or second degree heart block.
- c. = **Heart Block, 3rd degree:** Includes complete heart block or AV dissociation.
- d. = **Supraventricular Arrhythmia:** Includes SVT, supraventricular tachycardia, atrial fibrillation, atrial flutter, atrial tachycardia, atrial couplets or paroxysmal atrial tachycardia.
- e. = **Ventricular Arrhythmia:** Includes frequent multifocal or multiform PVCs, ventricular couplets, bigeminy, ventricular triplets, trigeminy, ventricular tachycardia, runs of ventricular tachycardia, V-tach, salvos or ventricular fibrillation.
- f. = **Sinus Node Dysfunction:** Includes SA block, SA arrest or sick sinus syndrome.
- g. = **Non-malignant bradycardia/tachyarrhythmia:** Includes sinus bradycardia, bradycardia, non-malignant





bradycardia, sinus tachycardia, tachycardia or tachyarrhythmia.

- 43. **Shock:** Includes cardiogenic shock, septic shock, cardiovascular collapse, intravascular collapse or any type of shock.
- 44. **Cardiomegaly:** Includes enlarged heart, heave or active precordium.
- 45. **Pulmonary Edema:** Includes pulmonary congestion, congestive heart failure (CHF), wet lungs, cardiac decompensation, fluid overload, interstitial edema or pulmonary vascular congestion.
- 46. **Peripheral Edema:** Includes sacral edema , fluid in tissues, pedal edema or edema of lower extremities.
- 47. **Pulse Deficit:** Includes absent (0), diminished or markedly impaired peripheral pulses (1+).

### **Vascular Disease**

- 48. **Central Vascular Disease:** Includes coronary artery disease, CAD, ASHD, ASCVD or carotid stenosis.
- 49. **Peripheral Vascular Disease:** Includes PVD, venous peripheral vascular disease, thrombophlebitis, venous ulceration, arterial peripheral vascular disease, ischemia to extremities, arterial obliterans, intermittent claudication, arterial insufficiency, ischemic claudication or claudication.

### **Pulmonary**

#### **Pulmonary History**

- 50. **Pulmonary Disease:** Includes emphysema, bronchitis, chronic bronchitis, bronchiectasis, chronic obstructive pulmonary disease (COPD), chronic pulmonary disease, asthma, fibrosis, granuloma, chronic inflammatory process, chronic obstructive lung disease, chronic obstructive airway disease or tuberculosis.
- 51. **Pulmonary Surgery:** Includes pneumonectomy, bronchoscopy, lung biopsy or lobectomy.

#### **Current Pulmonary**

- 52. **Cough - Hemoptysis:** Cough with blood streaked sputum/phlegm or coughing of frank blood.



### *Cholecystectomy*

53. ***Cough - Productive:*** Cough that produces phlegm or sputum.
54. ***Cough - Non-productive:*** Dry or dry-hacking cough. Includes cough without description of productive or non-productive.
55. ***Labored breathing:*** Dyspnea, labored breathing, fighting for air, shortness of breath (SOB) and use of respiratory muscles/intercostal retractions.

### **History of Cancer**

56. ***Cancer, any type:***

If "YES", identify type and stage of cancer:

- a. ***Type of Cancer***
- b. ***Stage of Cancer:***

- 1 = **Local:** Cancer with only local involvement; self-contained tumor, encapsulated tumor, in situ tumor or Dukes A. This option is also to be selected when there is documentation of cancer NOS or cancer with no mention of metastasis or nodal involvement.
- 2 = **Regional:** Solid tumors with regional involvement; tumor with involvement of nodes only or Dukes B.
- 3 = **Metastatic:** Cancer (CA) tumor, malignancy, carcinoma, sarcoma, malignant tumor type undetermined, melanoma, or any term ending in sarcoma or carcinoma. The preceding CA terms must be associated with a metastasis, spread, extension, invasion or infiltration to any organ, bone, subcutaneous tissue, muscle, etc. Include Dukes C or D with the primary site unknown.
- 9 = **Unknown:** The stage of cancer cannot be determined or if documentation is illegible.

### **Abdominal**

#### **Abdominal GI Symptoms/Disease/Surgery**

57. ***Nausea:*** (ENTER BEST DESCRIPTION)

- 0 = No history or presence of nausea on admission.
- 1 = History of nausea.
- 2 = Nausea on admission
- 3 = Both: History and presence of nausea on admission.
- 9 = Unknown: History/admission finding of nausea cannot be determined.



58. ***Vomiting:*** (ENTER BEST DESCRIPTION)

- 0 = No history or presence of vomiting/emesis on admission.
- 1 = History of vomiting/emesis.
- 2 = Vomiting/emesis on admission.
- 3 = Both: History and presence of vomiting/emesis on admission.
- 9 = Unknown: History/admission finding of vomiting/emesis cannot be determined.

59. ***Food Intolerance:*** History of food intolerance.

60. ***Flatulence:*** History of flatulence.

61. ***Heartburn:*** Includes indigestion or burning in the stomach.

62. ***Jaundice:*** (ENTER BEST DESCRIPTION)

- 0 = No history or presence of jaundice on admission.
- 1 = History of jaundice.
- 2 = Jaundice on admission.
- 3 = Both: History and a presence of jaundice on admission.
- 9 = Unknown: History/admission finding of jaundice cannot be determined.

63. ***RUQ Mass:*** (ENTER BEST DESCRIPTION)

- 0 = No history or admission finding of RUQ mass, lump or tumor.
- 1 = History of RUQ mass, lump or tumor.
- 2 = RUQ mass, lump or tumor detected this admission.
- 3 = Both: History and admission finding of RUQ mass, lump or tumor.
- 9 = Unknown: History/admission finding of RUQ mass, lump or tumor cannot be determined.

64. ***Abdominal/RUQ pain/tenderness to touch:*** (ENTER BEST DESCRIPTION)

- 0 = No history or admission finding of abdominal or RUQ pain/tenderness.
- 1 = History of abdominal/RUQ pain/tenderness.
- 2 = Admission finding of abdominal or RUQ pain/tenderness.
- 3 = Both: History and admission finding of abdominal or RUQ pain/tenderness.
- 9 = Unknown: History/admission finding of abdominal or RUQ pain/tenderness cannot be determined.

65. ***Any radiating pain (Abdominal):*** (ENTER BEST DESCRIPTION)

- 0 = No history or admission finding of abdominal pain with radiation.
- 1 = History of abdominal pain with radiation.





## *Cholecystectomy*

- 2 = Admission finding of abdominal pain with radiation.
- 3 = Both: History and admission finding of abdominal pain with radiation.
- 9 = Unknown: History/admission finding of abdominal pain with radiation cannot be determined.

66. ***Weight Loss:*** History of weight loss or inanition.

67. ***Epigastric Pain:*** (ENTER BEST DESCRIPTION)

- 0 = No history or admission finding of epigastric pain.
- 1 = History of epigastric pain.
- 2 = Admission finding of epigastric pain.
- 3 = Both: History and admission finding of epigastric pain.
- 9 = Unknown: History/admission finding of epigastric pain cannot be determined.

68. ***Belching:*** History of belching or burping.

69. ***Murphy's sign:*** (ENTER BEST DESCRIPTION)

- 0 = No history or admission finding of a positive Murphy's sign.
- 1 = History of a positive Murphy's sign.
- 2 = Admission finding of a positive Murphy's sign.
- 3 = Both: History and admission finding of a positive Murphy's sign.
- 9 = Unknown: History/admission finding of a positive Murphy's sign cannot be determined.

70. ***Loss of Appetite:*** Includes history of loss of appetite or anorexia.

71. ***Hepatic Disease:*** Includes cirrhosis or abnormal liver function tests.

72. ***Biliary Tract Disease:*** (ENTER BEST DESCRIPTION)

- 0 = No history or admission finding of a bile duct stricture, cholecystitis, cholangitis or stones.
- 1 = History of a bile duct stricture, cholecystitis, cholangitis or stones.
- 2 = Admission finding of a bile duct stricture, cholecystitis, cholangitis or stones.
- 3 = Both: History and admission finding of a bile duct stricture, cholecystitis, cholangitis or stones.
- 9 = Unknown: History/admission finding of a bile duct stricture, cholecystitis, cholangitis or stones cannot be determined.

73. ***Pancreatic Disease:*** Chronic

74. ***Acute Pancreatitis on Admission***





## *Cholecystectomy*

75. ***History of GI Surgery:*** Includes surgery of the esophagus, stomach, upper or lower bowel.
76. ***Upper GI Disease:*** Includes history of ulcers, gastritis, esophagitis, gastro-esophageal reflux, reflux/hiatal/diaphragmatic hernia, dysphagia or esophageal varices. Upper GI includes the esophagus, stomach and duodenum.
77. ***GI Bleeding:*** Includes chronic or history (Hx) of gastrointestinal (GI) bleed (bld), UGI bleed, LGI bleed or bleeding gastric or bleeding duodenal ulcer. Also select this option when the record indicates anemia or iron deficiency due to GI bleed.
78. ***Colicky Pain:*** History of colic or colicky pain.
79. ***More than one Episode of Biliary Colic:*** History of biliary colic
80. ***Acute Cholecystitis Episode:*** (ENTER BEST DESCRIPTION)
- 0 = No history or admission finding of acute cholecystitis.
  - 1 = History of an acute cholecystitis episode.
  - 2 = Admission finding of acute cholecystitis.
  - 3 = Both: History and admission finding of acute cholecystitis.
  - 9 = Unknown: History/admission finding of acute cholecystitis cannot be determined.
81. ***Portal Hypertension:*** History of portal hypertension (renal vascular hypertension).
82. ***Previous Abdominal Surgery:*** History of abdominal surgery, any type.
83. ***Upper Abdominal Surgical Scars with Adhesions:*** Upper abdominal surgical scars and adhesions.
84. ***Empyema or Mucocele of Gallbladder:*** (ENTER BEST DESCRIPTION)
- 0 = No history or admission finding of empyema or mucocele of the gallbladder.
  - 1 = History of empyema or mucocele of the gallbladder.
  - 2 = Admission finding of empyema or mucocele of the gallbladder.
  - 3 = Both: History and admission finding of empyema or mucocele of the gallbladder.
  - 9 = Unknown: History/admission finding of empyema or mucocele of the gallbladder cannot be determined.
85. ***Elevated Serum Amylase:*** (ENTER BEST DESCRIPTION)



### *Cholecystectomy*

- 0 = No history or admission finding of an elevated, increased or above normal range serum amylase.
- 1 = History of an elevated, increased or above normal range serum amylase.
- 2 = Admission finding of an elevated, increased or above normal range serum amylase.
- 3 = Both: History and admission finding of an elevated, increased or above normal range serum amylase.
- 9= Unknown: History/admission finding of an elevated, increased or above normal range serum amylase cannot be determined.

86. ***Elevated Urine Amylase:*** History of elevated, increased or above normal range serum urine amylase.

### **Current Abdominal**

- 87. ***Abdominal Mass:*** Includes inguinal hernia, bulging inguinal mass or abdominal lump or tumor.
- 88. ***Abdominal Distention:*** Includes bloating, increased abdominal girth or tympany.
- 89. ***Rectal Blood:*** Includes bright red blood per rectum (BRBPR) or passing clots.
- 90. ***Abdominal Rigidity/Guarding/Rebound:*** Includes a positive Murphy's sign.
- 91. ***Ascites:*** Includes positive fluid wave.

### **History of Autoimmune Disease**

92. ***Autoimmune Disease:*** Includes collagen vascular disease, connective tissue disease, systemic lupus erythematosus (SLE), scleroderma and rheumatoid arthritis.

### **History Major Organ Surgery**

- 93. ***Major Organ surgery:*** Surgery or removal of any major organ (e.g., lung, liver, bowel, spleen, kidney). **Excludes appendix, tonsils, adenoids, gallbladder, prostate and uterus.**
- 94. ***Liver Transplant***

### **History of Endocrine/Diabetes**



### *Cholecystectomy*

95. **Chronic Endocrine Disease:** Includes hyperthyroidism, hypothyroidism, hyperparathyroidism, hyperadrenalism, hypoadrenalism, Addison's disease or pituitary dysfunction.
96. **Diabetes:**
- Select (1) if patient has insulin dependent diabetes mellitus (IDDM).
- Select (2) if patient is a non-insulin dependent diabetic, borderline diabetic or is a diabetic who was not on insulin prior to admission.
97. **HIV+, Symptomatic:** Symptomatic HIV+, AIDS, HIV, HIV positive, acquired immune deficiency syndrome, AIDS related complex or ARC.
98. **HIV+, Asymptomatic:** Same as above but is **asymptomatic**.
99. **Chronic Weight Loss:** Chronic weight loss or inanition.
100. **Chronic Systemic Infection:** Includes viral (e.g., hepatitis), bacterial, fungal and protozoan (e.g., malaria).

### **Urological History**

101. **Flank Pain:** Flank pain or tenderness.
102. **Chronic Renal Failure:** Chronic renal failure requiring dialysis.

### **Musculoskeletal History**

103. **Back Pain:** All qualifiers and modifiers are accepted.

### **Non-Specific Findings:**

104. **Fever  $>101^0F$  or  $38.3^0C$ :** (SELECT BEST DESCRIPTION)
- 0 = No history or presence of fever on admission.  
1 = History of fever.  
2 = Fever on admission.  
3 = Both: History and presence of fever on admission.  
9 = Unknown: History or presence of fever on admission cannot be determined.
105. **Chills:** (SELECT BEST DESCRIPTION)
- 0 = No history or presence of chills, shaking spells or night sweats on admission.  
1 = History of chills, shaking spells or night sweats.  
2 = Chills, shaking spells or night sweats present on admission.







## *Cholecystectomy*

- 3 = Both: History and presence of chills, shaking spells or night sweats on admission.
- 9 = Unknown: History and presence of chills, shaking spells or night sweats cannot be determined.

### 106. **Elevated WBC:** (SELECT BEST DESCRIPTION)

- 0 = No History or admission finding of an elevated WBC.
- 1 = History of an elevated WBC.
- 2 = WBC elevated on admission.
- 3 = Both: History and elevated WBC on admission.
- 9 = Unknown: History/admission finding of an elevated WBC cannot be determined.

### 107. **Left Shift:** Includes patients who have an increase in bands (one above the hospital's normal range of limits) or left shift in the 2 weeks prior to or at the time of admission. (SELECT BEST DESCRIPTION)

- 0 = No history of an increase in bands (above the hospital's normal range of limits) or a left shift.
- 1 = History of an increase in bands (above the hospital's normal range of limits) or a left shift.
- 2 = Increase in bands (above the hospital's normal range of limits) or a left shift on admission.
- 3 = Both: History and an increase in bands (above the hospital's normal range of limits) or a left shift on admission.
- 9 = Unknown: History/admission finding of an increase in bands (above the hospital's normal range of limits) or a left shift cannot be determined.

## **LABORATORY TESTS**

**General Instructions:** Lab results must be obtained from the laboratory reports whenever possible. If the value is illegible or the time the specimen was drawn/collected is missing and this information is needed to determine when the test was performed, the information may be abstracted from anywhere in the medical record. Record the laboratory values as documented in the record, indicate the unit of measurement for each test and record the date blood was drawn. The following may also be used to assist the abstractor in determining results or times:

- ER Record
- Observation Bed Record
- History and Physical Notes
- Progress Notes
- Nursing Notes

If a specific lab test was not done, enter "0" for the value and leave the code, date and range fields blank unless otherwise specified. If you are unable to determine a lab value and/or range, enter "999" unless otherwise specified. If you are unable to determine a lab date, enter "11/11/11".



## *Cholecystectomy*

Unless otherwise directed, enter the following codes to indicate whether a test result is within, below, or above the hospital's normal range limits:

- Within normal, enter 1.
- Below normal, enter 2.
- Above normal, enter 3.
- If there is no preoperative lab value documented in the record, but the result is noted to be abnormal, enter 4.
- If you are unable to determine whether the test is within normal limits or if the hospital's range of limits is unavailable, enter 9.

### **Laboratory Definitions:**

Preoperative: Abstract lab value obtained closest to surgical date. Include test results obtained within 6 weeks prior to admission providing the results are contained or referenced to in the medical record.

Interim: Worst lab value obtained **after the first two days of admission** but excluding the last test performed. If more than one test has the same worst value, select the test from the date closest to discharge. If only one value was obtained 2 days after admission, enter this as a final value and enter "0" for interim.

Intraoperative: Worst lab value obtained during the operation.

Postoperative: Worst lab value obtained after surgery but excluding the last test performed. If more than one test has the same worst value, select the test from the date closest to discharge.

Final: Last lab test obtained prior to discharge. If the only test performed was preoperative, enter "0".

Worst lab value: The highest value for all tests except Hgb. and Hct., in which case worst means the lowest value.

### **Chemistry**

108. ***Total Bilirubin:*** Abstract preoperative, postoperative and final values as applicable.
109. ***BUN:*** Abstract preoperative, postoperative and final values as applicable.
110. ***Creatinine:*** Abstract preoperative, postoperative and final values as applicable.
111. ***Alkaline Phosphatase:*** Abstract preoperative value only.



### *Cholecystectomy*

- 112. ***Amylase:*** Abstract preoperative, postoperative and final values as applicable.
- 113. ***SGOT/AST:*** Abstract preoperative, postoperative and final values as applicable.
- 114. ***SGPT/ALT:*** Abstract preoperative, postoperative and final values as applicable.
- 115. ***GGT:*** Abstract preoperative, postoperative and final values as applicable.

### **Hematology**

- 116. ***Hematocrit:*** Abstract preoperative value only.
- 117. ***Hemoglobin:*** Abstract preoperative value only.
- 118. ***WBC:*** Abstract preoperative, postoperative and final values as applicable.
- 119. ***Prothrombin time:*** Abstract preoperative value only.
- 120. ***Partial thromboplastin time:*** Abstract preoperative value only.

### **Urinalysis**

If a urinalysis was performed in the specified time frame, please indicate the descriptive code for **WBC** and **bacteria** results:

- 0 = Not done
- 1 = Negative: Includes trace, rare, occasional, few, 5 cells and positive bacterial findings as a result of contamination.
- 2 = Positive: Includes anything greater than trace, rare, occasional, few or five cells. Many, clumped and too numerous to count (TNTC) are considered positive findings as is a bacterial finding of 1+ or greater.
- 9 = Unknown

A positive leukocyte esterase is **not** a positive finding. Results should be taken from the microscopic section of the UA.

- 121. ***WBC:*** Abstract preoperative, postoperative and final values as applicable.
- 122. ***Bacteria:*** Abstract postoperative and final values as applicable.

### **Microbiology/Culture**

Descriptive codes for **abscess**, **blood** and **sputum** culture results:

- 0 = No culture
- 1 = No growth





## *Cholecystectomy*

- 2 = Positive: Includes findings of abnormal growth
- 3 = Contaminant
- 9 = Unknown

123. ***Abscess:*** Abstract postoperative, and final values as applicable.

124. ***Blood:*** Abstract postoperative, and final values as applicable.

125. ***Sputum:*** Abstract postoperative, and final values as applicable.

126. ***Urine:*** Descriptive codes for urine culture results:

- 0 = No culture
- 1 = <100,000
- 2 =  $\geq 100,000$  (of a single organism). Includes heavy growth.
- 3 = Contaminant
- 8 = No Growth
- 9 = Unknown

If a range is given (e.g., 50,000 to 150,000) record the worst result.

Descriptive codes for **wound, peritoneal fluid** and **gallbladder** cultures:

- 0 = No culture
- 1 = No growth
- 2 = Positive includes findings of abnormal growth
- 3 = Contaminant
- 9 = Unknown

127. ***Wound:*** Includes cultures from decubitus ulcers and graft sites. For intraoperative, use cultures from operative site only. . Abstract intraoperative, postoperative and final values as applicable.

128. ***Peritoneal Fluid***

129. ***Gallbladder***

## **DIAGNOSTIC TESTS**

### **General Instructions:**

- Radiology Report
- Physician H&P/Notes
- Physician Consultant H&P/Notes
- Physician Progress Notes
- Physician Emergency Room Notes/Reports





## *Cholecystectomy*

Listed above, in priority order, are the acceptable locations for obtaining radiology information. Use the highest priority location for abstracting data. Multiple sources may be used. Radiology findings noted pre-arrival, including prior office reports, may be used.

### **Chest X-ray:**

#### 130. Preoperative Chest X-ray:

If "YES", complete the following:

- a. Date: Most recent, preoperative CXR.
- b. Normal: Select if the findings in (c) - (h) are not noted in the x-ray report.

If **ABNORMAL**, indicate the abnormality:

- c. Infiltrate: Includes lobar or segmental infiltrates, patchy infiltrates, basilar opacities or pneumonia.
- d. Pleural Effusion: Includes pleural or basal effusion.
- e. Pneumothorax
- f. Pulmonary Edema: Includes pulmonary edema or acute pulmonary edema. **Excludes pulmonary congestion or chronic pulmonary edema.**
- g. Atelectasis: Includes atelectasis, discoid or basilar atelectasis and subsegmental platelike atelectasis.
- h. Congestive Heart Failure: Includes volume or fluid overload, pulmonary vascular congestion or cardiac decompensation.

### **Upper GI**

#### 131. Preoperative Upper GI:

If "YES", was it normal?

If **ABNORMAL**, complete sections (b) through (i) using the terms outlined in Appendix D.

### **Barium Enema/Swallow**



## *Cholecystectomy*

132. *Preoperative Barium Enema:* Indicate whether a preoperative barium enema was done.
133. *Preoperative Barium Swallow:* Indicate whether a preoperative barium swallow was done.

### **Gallbladder/Cholecystogram**

134. *Preoperative Gallbladder/Cholecystogram:*

If “YES”, was it normal?

If **ABNORMAL**, complete sections (b) through (i) terms outlined in Appendix D.

### **Flat Plate**

135. *Preoperative Flat Plate:*

If “YES”, was it normal?

### **KUB/Abdominal X-ray**

136. *Preoperative KUB/Abdominal X-ray:*

If “YES”, was it normal?

### **Ultrasound of Gallbladder**

137. *Preoperative Ultrasound - Gallbladder:*

If “YES”, was it normal?

If **ABNORMAL**, complete sections (b) through (g) using the terms outlined in Appendix D.

(h) *Abdomen: Abnormal Mass-Solid/Cystic:* Includes mass, tumor, lesion, polyp or growth.

(i) *Abdomen: Dilated Bile Duct*

(j) *Other findings:* Select “YES” when the findings of the test are adequately and clearly documented, but do not fit into any of the above categories.

### **CAT Scan - Chest, Body**



138. Preoperative CAT Scan - Chest, Body:

If “YES”, was it normal?

If **ABNORMAL**, complete sections (b) through (g) using the terms outlined in Appendix D.

**CAT Scan - Chest, Body**

139. Postoperative CAT Scan - Chest, Body:

If “YES”, was it normal?

If **ABNORMAL**, complete the following:

- a. Chest: Infiltrate: Includes lobar or segmental infiltrates, patchy infiltrates, basilar opacities or pneumonia.
- b. Chest: Pleural Effusion: Includes pleural or basal effusion of the lungs.
- c. Pulmonary Embolism: Includes high, intermediate or moderate probability of pulmonary embolism (PE), lung embolism or positive VQ.

**Nuclear Medicine/Hepatobiliary Scan:**

140. Preoperative Nuclear Medicine/Hepatobiliary Scan: Hepatobiliary scans include HIDA, PIPIDA and DISIDA

If “YES”, was it normal?

If **ABNORMAL**, complete sections (b) through (f) using guidelines outlined in Appendix D.

- (g) Bile Leak: Includes evidence of a bile leak.
- (h) Obstruction: Includes evidence of benign stricture, malignant stricture, stricture, partial obstruction or total obstruction or narrowing.
- (i) Other findings: Select “YES” when the findings of the test are adequately and clearly documented, but do not fit into any of the above categories.





**ENDOSCOPY**

141. *Preoperative Upper/Lower GI Endoscopy:*

If “YES”, continue.

a. Indicate the type of GI endoscopy performed:

1 = Upper

2 = Lower

3 = Both

9 = Unknown

b. Normal:

If **ABNORMAL**, complete sections (c) through (g) using the guidelines outlined in Appendix D.

142. *Preoperative ERCP (Endoscopic Retrograde Cholangiopancreatography) or ERC:*

If “YES”, was it normal?

If **ABNORMAL**, complete sections (b) through (f) using Appendix D guidelines.

(g) Bile duct stricture: Includes a benign bile duct stricture, malignant bile duct stricture, stricture, partial obstruction or total obstruction or narrowing.

(h) Other findings: Findings which do not fit into the categories outlined above.

(i) Stone Retrieval: Includes stone retrieval.

(j) Anesthetic Risk: Enter the code indicating the level of anesthetic risk classification for this operative episode (Appendix B).

(k) Anesthesia Type: Select the appropriate code to indicate the type of anesthesia used during this operative episode (Appendix A).

(l) Pathology findings: Record the findings of this operative episode as defined in Appendix C.

143. *Postoperative ERCP (Endoscopic Retrograde Cholangiopancreatography) or ERC:*



## *Cholecystectomy*

If “YES”, was it normal?

If **ABNORMAL**, complete sections (b) through (f) using Appendix D guidelines.

- (g) Bile duct stricture: Includes benign or malignant bile duct stricture, stricture, partial or total obstruction or narrowing.
- (h) Other findings: Findings which do not fit into the categories outlined above.
- (i) Anesthetic Risk: Enter the code indicating the level of anesthetic risk classification for this operative episode (Appendix B).
- (j) Anesthesia Type: Select the appropriate code to indicate the type of anesthesia used during this operative episode (Appendix A).
- (k) Pathology findings: Record the findings of this operative episode as defined in Appendix C.

### 144. Preoperative Percutaneous Cholangiogram:

If “YES”, was it normal?

If **ABNORMAL** answer sections (b) through (f) using terms outlined in Appendix D.

Other findings: Select “YES” if there is documentation of other findings which do not fit into the categories outlined.

145. **Test Unspecified**: Documentation indicates that a test was performed preoperatively, but the type of test is not specified. If more than one test was done, record the results of the most recent report.

If “YES”, was it normal?

If **ABNORMAL**, answer sections (b) through (f) using the terms outlined in Appendix D.

Other findings: Select “YES” if there is documentation of other findings which do not fit into the categories outlined.

## **OPERATIVE EPISODES**

Acceptable sources, in priority order, for abstracting operative information:



## *Cholecystectomy*

- Operative Report
- Anesthesia Record/Notes
- Operating Room Nurse Report
- Postoperative Physician Progress Notes
- Recovery Room Record/Post-Anesthesia Record (PAR)

146. ***Operative Episode:*** Enter the number to indicate which operative episode you are recording (e.g., 1, 2, 3, etc.).

- Date:*** Enter the date of the procedure. If the procedure was started prior to midnight and continued after midnight, enter the date that anesthesia was **started**.
- Start time:*** Enter in military time. For the “start” time indicate the time that anesthesia was initiated. If the anesthesia sheet does not contain “Start Time”, use the first vital sign time recorded on the anesthesia graphic sheet.
- Stop time:*** Enter in military time. For the “end” time indicate the time that anesthesia was discontinued. If the anesthesia sheet does not contain “End Time” use the last vital sign time recorded on the anesthesia graphic sheet.
- ICD - 9 - CM procedure codes:*** Enter the ICD-9-CM codes for each procedure performed during this operative episode. If only narrative descriptions are available, record “0”.
- Anesthetic Risk:*** Enter the code indicating the level of anesthetic risk classification for this operative episode (Appendix B).
- Anesthesia type:*** Select the appropriate code to indicate the type of anesthesia used during this operative episode (See Appendix A).
- Pathology/Operative findings:*** For questions 1-9, record the findings of this operative episode as defined in Appendix C.
  - (10) Cirrhosis
  - (11) Peritonitis
  - (12) Perforation of Gallbladder
  - (13) Perforation of Bowel
  - (14) Other Findings
  - (15) Pathology Report
- Operative Information:***





- (1) **High Blood Pressure:** Enter the patient's highest recorded intraoperative blood pressure which occurred from the time the patient entered the operating room until he/she left the recovery room (e.g., highest systolic and diastolic blood pressures). Note these readings may be obtained from different BP checks. Do not record the leading zeros (e.g. if the BP is recorded as 098/088, record 98/88).
- (2) **Low Blood Pressure:** Enter the patient's lowest recorded intraoperative blood pressure which occurred from the time the patient entered the operating room until he/she left the recovery room (e.g., lowest systolic and diastolic blood pressures). Note these readings may be obtained from different BP checks. Do not record the leading zeros (e.g., if the BP is recorded as 098/088, record 98/88).

Palpated blood pressures and pressures obtained with a Doppler are acceptable. When palpated or Doppler blood pressures are used, fill in the systolic pressure and put zeros (00) in the associated diastolic field. For patients with "no palpable pressure", record "00" (zeros) for both systolic and diastolic low readings.

- i. Estimated blood loss (EBL): Enter the blood loss in cubic centimeters (cc) which occurred from the time the patient entered the operating room until he/she left the recovery room. Note that the total blood loss may need to be calculated from several sources (e.g., If the intraoperative blood loss is recorded as 200cc and 50cc is emptied from a drain in PACU, record 250cc for the EBL). When there is documentation in the medical record of a minimal or negligible blood loss, record 50 cc. If the record states: "less than X cc blood loss", record X. If the estimated blood loss is zero or - , or "nil", record "0". If the estimated blood loss is unavailable, enter "9999". If the EBL is recorded as a range, record the high value. If there is conflicting information use the following priority order:

- Anesthesiologist Report
- Operative Report
- Progress Notes
- PACU Record

**Additional Operative Procedures:**

- j. Cholangiogram
- k. Duodenotomy





## *Cholecystectomy*

- l. Appendectomy
- m. Sphincteroplasty
- n. Repair of Common Bile Duct Stricture
- o. Choledochoduodenostomy
- p. Choledochojejunostomy
- q. Intraoperative ERCP (Endoscopic Retrograde Cholangiopancreatography or ERC)
- r. Common bile duct exploration:

If "YES", continue:

- (1) **Was a Choledochoscope Used?**
- (2) **Were stones found in the bile duct?**
- (3) **Was a T-Tube Used?** Select "YES" if a T-tube was used during the common bile duct exploration. Abstract information from the operative report.
- (4) **Was another bile duct tube used?** Select "YES" if any other type of bile duct tube was used during the common bile duct exploration (e.g., Jackson Pratt).

147. **Procedure Type:** Select the option which best identifies the type of procedure performed. Listed below in priority order are the acceptable locations for abstracting this information.

- Physician Operative Report/Progress Notes
  - Anesthesia Record
  - Nurse Intraoperative Record/Recovery Room Notes
- a. Open: Includes exploratory laparotomy.
  - b. Mini-Laparotomy
  - c. Conversion: This is defined as a procedure type that starts as a laparoscopy procedure and is converted to an open procedure.
  - d. Laparoscopy-Cautery



e. Laparoscopy-Laser

**OPERATIVE ADVERSE OCCURRENCES**

**General Instructions:** Refer to the list to identify all adverse intraoperative occurrences that **began** when the patient entered the Operating/Endoscopy Room and ended when he/she left the Recovery Room. All adverse occurrences, whether they were predictable from the patient's condition or not, should be recorded in this screen and must be **documented by a physician**.

Listed below in priority order are the acceptable locations for abstracting the operative adverse occurrences.

- Physician Operative Report/Progress Notes
- Anesthesia Record

148. *Any Operative Adverse Occurrences?*

If "YES", identify:

- a. AMI: Acute myocardial infarction (AMI).
- b. Respiratory Arrest: Documentation indicates that breathing stopped, respirations ceased, or patient experienced respiratory/ cardiopulmonary arrest.
- c. Sustained Arrhythmia: Sustained arrhythmia is defined as a run of ventricular tachycardia lasting more than 20 beats, run of sustained ventricular tachycardia (SVT), run of ventricular tachycardia (VT or V-tach), atrial fibrillation or atrial flutter if this is not the patient's underlying rhythm.
- d. Cardiac Arrest: Cardiac arrest, ventricular fibrillation (V-fib) or cardiopulmonary arrest.
- e. Hyperthermia: Includes hyperpyrexia or a temperature greater than 101<sup>0</sup>F or 38.3<sup>0</sup>C.
- f. Seizure: Includes epileptic attack.
- g. Stroke: Includes cerebral vascular accident (CVA), infarct, transient ischemic attack (TIA), cerebral embolism, cerebral thrombolism or cerebral infarct.



## *Cholecystectomy*

- h. *Uncontrolled Bleeding or Shock:* Includes intraoperative complication of hemorrhage, uncontrolled bleeding, bleeding >300 cc or shock. Includes cardiogenic shock, septic shock, cardiovascular or intravascular collapse or any type of shock. This is also defined as blood loss greater than 500 cc.
- i. *Inability to Insufflate:* Intraoperative complication of inability to insufflate.
- j. *Inability to grasp the Gallbladder:* Intraoperative complication of inability to grasp the gallbladder.
- k. *Laceration of the Aorta*
- l. *Laceration of the Hepatic Artery*
- m. *Laser Destruction of Portal Vein*
- n. *Laceration of Bile Duct*
- o. *Bowel Injury:* Intraoperative complication of bowel injury, any type.
- p. *Tear of Gallbladder*
- q. *Stone Spillage*
- r. *Liver Laceration*
- s. *Other Adverse Occurrences:* Documentation of adverse intra-operative occurrences which do not fit in the categories listed above.

## **TREATMENT INTERVENTIONS**

**General Instructions:** Document all treatment interventions which occurred during this hospital admission.

### 149. *Postoperative Embolic Prophylaxis:*

If “YES”, complete this section.

- a. *Heparin:* Select “YES” if the patient received heparin therapy postoperatively (See Appendix G).
- b. *Coumadin:* Select “YES” if the patient received coumadin therapy postoperatively (See Appendix G).





## *Cholecystectomy*

- c. ASA: Select “YES” if the patient received aspirin therapy postoperatively (See Appendix F).
- d. CPM: Continuous passive motion therapy.
- e. TEDS: Select “YES” if the patient received TEDS preoperatively. Includes sequential TEDS, sequential compression stockings, compression stockings, elastic stockings/hose or antiembolism stockings/hose.
- f. Other: Documentation of other postoperative embolic prophylaxis which does not fit into the categories outlined above. Specify the treatment documented in the medical record.

Acceptable sources for collecting **postoperative embolic prophylaxis** information. If information from one location conflicts with information from another location, the above list should be considered priority order.

- Physician
- Nursing Notes/Flowsheet

150. ***Incentive Spirometry***: Postoperatively

151. ***Blood Products***:

Acceptable sources for collecting blood products information:

- Blood administration Record
- Physician Progress Notes
- Nursing Progress Notes/Flowsheets
- Lab Slips
- IV Flowsheets
- Anesthesia Notes

If “YES”, indicate whether the patient received.

- a. Autologous blood: Indicate whether RBC’s or whole blood given.
- b. Homologous blood: Indicate whether RBC’s or whole blood given.
- c. RBC’s
- d. Whole Blood
- e. Platelets/Platelet Concentrate
- f. Fresh Frozen Plasma (FFP)
- g. Cell-saver: Includes autovac, solcotron, and constavac (c-vac). Abstract only if blood was reinfused through a cell-saver.



If the patient **did not receive any blood products** this admission, **skip to #152.**

## **PRESCRIBED MEDS**

Acceptable sources for medication administration:

- Medication Administration Records
- Preoperative Preprocedure Checklist
- IV Flowsheets
- ICU Flowsheets
- Operative Report
- Anesthesia Records
- Post Anesthesia Care Records
- Emergency Room Records

152. **Initial Antibiotics:** Record the date patient received the first dose of antibiotics during this hospitalization. Record "12/12/12" if antibiotics were never ordered. Record "11/11/11" if you are unable to determine if antibiotics were ordered. Record any preoperative antibiotics given for cystitis.

153. **Preoperative Antibiotics:** Indicate whether the patient received preoperative antibiotics during this hospitalization. Record any preoperative antibiotics given for cystitis.

If "NO" preoperative antibiotics given or "UNKNOWN", enter "0" and skip to #154. If antibiotics given, continue.

a. **Antibiotic # 1:** Enter the code to identify the first preoperative antibiotic using selections in Appendix E.

b. **Time of Administration # 1:** Enter the code to identify when the **last** dose of antibiotic was received before surgery start time.

1 = Last dose received < 24 hours before surgery.

2 = Last dose received  $\geq 24$  -  $\leq 36$  hrs before surgery.

3 = Last dose received > 36 -  $\leq 48$  hrs before surgery.

4 = Last dose received > 48 -  $\leq 72$  hrs before surgery.

5 = Last dose received > 72 hrs before surgery.

9 = Unknown

c. **Antibiotic # 2:** Enter the code to identify the second preoperative antibiotic using selections in Appendix E. If only one antibiotic was given as recorded above, enter "0" and skip to Question #153e.



- d. *Time of Administration # 2:* If an antibiotic is recorded in #153c, please enter the time code as outlined in #153b.
- e. *Antibiotic # 3:* Enter the code to identify the third preoperative antibiotic using selections in Appendix E. If no third antibiotic was given, enter "0" and skip to Question #154.
- f. *Time of Administration # 3:* If an antibiotic is recorded in #153e, please enter the time code as outlined in #153b.

154. ***Intraoperative Antibiotics:***

If "NO" intraoperative antibiotics or "UNKNOWN", enter "0" and skip to #155. If "YES", continue.

- a. *Antibiotic # 1:* Enter the code to identify the first intraoperative antibiotic using selections in Appendix E.
- b. *Antibiotic # 2:* Enter the code to identify the second intraoperative antibiotic using selections in Appendix E.
- c. *Antibiotic # 3:* Enter the code to identify the second intraoperative antibiotic using selections in Appendix E.

155. ***Postoperative Antibiotics:*** Indicate whether the patient received postoperative antibiotics. Listed below are the acceptable locations for abstracting this information.

- Operative Report
- Anesthesia Records
- Postoperative Medication Administration Records
- Post Anesthesia Care Records
- ICU Flowsheets

If "NO" postoperative antibiotics or "UNKNOWN", enter "0" and skip to Question #156. If postoperative antibiotics given, continue:

- a. *Antibiotic # 1:* Enter the code to identify the **first** postoperative antibiotic using selections in Appendix E.
- b. *Time of Administration # 1:* Enter the code to identify the **first** antibiotic received after the surgery end time.
  - 1 = First dose received < 24 hours after surgery.
  - 2 = First dose received  $\geq 24 - \leq 36$  hrs after surgery.
  - 3 = First dose received > 36 -  $\leq 48$  hrs after surgery.





## *Cholecystectomy*

- 4 = First dose received > 48 - ≤72 hrs before surgery.
  - 5 = First dose received > 72 hrs after surgery.
  - 9 = Unknown
- c. Antibiotic # 2: Enter the code to identify the second postoperative antibiotic using selections in Appendix E. If only one antibiotic was given as recorded above, enter "0" and skip to Question #155e.
- d. Time of Administration # 2: If an antibiotic is recorded in #145c, please enter the time code as outlined in #155b.
- e. Antibiotic # 3: Enter the code to identify the third postoperative antibiotic using selections in Appendix E. If no third antibiotic was given, enter "0" and skip to Question #156.
- f. Time of Administration # 3: If an antibiotic is recorded in #155e, please enter the time code as outlined in #155b.
156. **Adverse Reaction to Medication:** Allergic reaction, intolerance or side effect to a medication.

## POSTOPERATIVE COMPLICATIONS

### GENERAL POSTOPERATIVE COMPLICATIONS

**General Instructions:** Refer to the list to indicate all postoperative complications that occurred after the patient left the recovery room. All postoperative complications, should be recorded in this screen and **must be documented by a physician or a nurse.**

This information may be found in:

- Postoperative Physician Notes
  - Postoperative Physician Consultant Notes
  - Postoperative Nursing Notes
157. Did the patient experience **postoperative complications** following transfer out of the recovery room?
- If "YES", identify the postoperative complication(s):
- a. Cardiac Arrest: Includes ventricular fibrillation (V-fib) or cardiopulmonary arrest.
- b. Shock: Includes hypovolemic shock, cardiogenic shock, septic shock, endotoxic shock, anaphylactic shock, shock due to





cardiovascular or intravascular collapse, drug/transfusion reaction, or any type of shock.

- c. Deep Vein Thrombosis: Includes (DVT), thrombus or thrombophlebitis. This does NOT include superficial or IV phlebitis.

If "YES", indicate extremity:

1 = Right  
2 = Left  
3 = Both  
9 = Unknown

- d. Operative Site bleeding: Includes hemorrhage, active bleeding/hemorrhage noted at operative site, or documentation that dressings were changed two or more times per day because they were saturated with bloody serous drainage.
- e. GI Hemorrhage, Occult Blood, Guaiac + Stool: Select "YES" when there is documentation of a general complication of GI hemorrhage, occult blood or guaiac + stool.
- f. GI Hemorrhage, Moderate Active Bleeding: Includes postoperative complications of GI hemorrhage or moderate active bleeding. Moderate GI hemorrhage is a GI hemorrhage requiring less than 2 units of blood.
- g. GI Hemorrhage, Massive Bleeding: Massive GI hemorrhage is a GI hemorrhage requiring 2 or more units of blood.
- h. Pulmonary Edema: Includes congestive heart failure (CHF) or acute pulmonary edema. This option does not include pulmonary congestion, chronic congestive heart failure or chronic pulmonary edema.
- i. Pulmonary Embolism: Includes high, intermediate, or moderate probability of pulmonary embolism (PE), lung embolism or positive VQ.
- j. Wound Infection/Abscess: Includes postoperative wound infection/abscess.
- k. Wound Failure (partial or complete): Includes partial or total wound failure or dehiscence.



## *Cholecystectomy*

- l. *Atelectasis:* Includes atelectasis, collapsed lung, collapsed right or left lobe, or subsegmental platelike atelectasis. This option does NOT include discoid or basilar atelectasis.
- m. *Hematoma at Operative Site*
- n. *Myocardial Infarction:* Includes acute myocardial infarction (AMI) or myocardial infarction (MI).
- o. *CVA:* Includes stroke, cerebral vascular accident (CVA), stroke, cerebrovascular incident (CVI), cerebral hemorrhage, cerebral occlusion, cerebral thrombosis, subarachnoid hemorrhage (SAH), intracranial hemorrhage, brain infarct or cerebral infarct.
- p. *Pneumonia:* Includes lobar or segmental infiltrates, patchy infiltrates, basilar opacities or pneumonia.
- q. *Respiratory Failure:* Includes respiratory arrest.
- r. *Urinary Retention:* Postoperative retention of urine. Abstract when the nurse notes bladder distension or patient complains of inability to void and patient is catheterized.
- s. *Arrhythmias:*

If "YES", identify the arrhythmia:

- 1 = **Sustained Ventricular Tachycardia:** Ventricular tachycardia lasting 10 seconds or more or literal documentation of sustained ventricular tachycardia or sustained V-tach.
- 2 = **Heart Block, 2nd degree:** Includes second degree AV block, Wenckebach block, Mobitz type I, Mobitz type II or second degree heart block.
- 3 = **Heart Block, 3rd degree:** Includes complete heart block or AV dissociation.
- 4 = **Supraventricular Arrhythmia:** Includes SVT, supraventricular arrhythmia, atrial fibrillation, atrial flutter, atrial tachycardia, atrial couplets or paroxysmal atrial tachycardia (PAT).
- 5 = **Ventricular Arrhythmia:** Includes, frequent multifocal or multiform PVCs, ventricular couplets, bigeminy, ventricular



triplets, trigeminy, ventricular tachycardia, runs of ventricular tachycardia, V-tach, salvos or ventricular fibrillation.

6 = **Sinus Node Dysfunction:** Includes SA block, SA arrest or sick sinus syndrome.

7 = **Non-malignant bradycardia/tachyarrhythmia:** Includes sinus bradycardia, bradycardia, non-malignant bradycardia, sinus tachycardia, tachycardia or tachyarrhythmia.

t. Coma

u. Gastric "Stress" Ulcer

v. Neuropathy

w. Bacteremia

x. CHF: Includes complication of congestive heart failure, pump failure, volume or fluid overload, pulmonary vascular congestion or cardiac decompensation.

y. UTI: Includes a positive urine culture.

z. Intubation  $\geq$  to 24 hours post surgery: Includes complication of intubation greater than or equal to 24 hours post surgery.

aa. Death

bb. Renal Failure

cc. ATN (acute tubular necrosis) not requiring dialysis; Creatinine 1.0 over baseline creatinine: Includes renal failure which does not require dialysis.

dd. Infection > 72 hours after admission

ee. Temperature > 38.5C or 101.3F

ff. Antibiotics given: Record any antibiotic given for an infection before discharge. Do not abstract antibiotics given prophylactically.

gg. Other: A postoperative complication is documented but does not fit into any of the other categories. Please specify.





**Postoperative GI Complications**

158. ***Postoperative GI complications:*** Did the patient experience postoperative GI complications following transfer out of the recovery room?

If “YES”, identify complication(s):

- a. *Pancreatitis*
- b. *Jaundice*
- c. *Retained Stones*
- d. *Bile Leakage*
- e. *Intra-Abdominal Abscess*
- f. *Biliary Obstruction*
- g. *Prolonged Intestinal Dismotility/Ileus:* Prolonged intestinal dismotility/ileus is defined as dismotility/ileus lasting 2 days or longer.
- h. *Intestinal Obstruction*
- i. *T-Tube Dislodgment.*
- j. *Traumatic Biliary Stricture:*
- k. *Sphincter Stenosis*
- l. *Intra-Abdominal Bleeding*
- m. *Bile collections/Biloma*
- n. *Postoperative Shoulder Pain*
- o. *Subcutaneous Emphysema*
- p. *Other findings:* Documentation clearly and adequately documents other postoperative GI complications not included in the list. Please specify the finding in the space provided.

**TRAUMA SUFFERED IN HOSPITAL**

159. ***Trauma suffered in hospital:***

If “YES”, identify the trauma:

- a. *Decubitus Ulcer:* Decubitus ulcer greater than Stage I occurred during this hospital stay. This option is NOT to be selected for decubitus ulcers which developed prior to this stay.
- b. *Accidental injury:* Includes but is not limited to injuries as a result of an assault (e.g., an assault by an employee, another person, a visitor), burns from food/beverage, injury from transport within the hospital, injuries from use of orthopedic equipment or PAS hose injuries. This does not include medication errors, IV infiltrates or falls.
- c. *Fall*



- d. Other: Patient suffered a trauma in the hospital but it is not listed in the above categories. Please specify.

**DISCHARGE PLAN/STATUS**

160. ***Planned ERCP post discharge***

161. ***Discharge ADL/Continence:***

- a. ***Bladder Continence:*** Select the appropriate code to record the patient's level of bladder continence on discharge from the hospital.

1 = Continent: No documentation of urinary incontinence. Bladder continence is considered to be present if documentation indicates stress incontinence.

2 = Incontinent: Patient is incontinent of urine or has a Foley catheter, ileo conduit, nephrostomy tube or cystotomy. This option includes patients who perform self-catheterization.

3 = Dialysis/No urine output: Chronic dialysis patient with no urine output.

9 = Inadequate Documentation: Patient's bladder continence cannot be determined.

- b. ***Bowel Continence:*** Select the appropriate code to record the patient's level of bowel continence on discharge from the hospital.

1 = Continent: No documentation of bowel incontinence.

2 = Incontinent: Patient is incontinent of stool; this does not include a colostomy or ileostomy.

3 = Bowel Ostomy: This includes patients with a colostomy or ileostomy. For patient's with a colostomy, this option is selected regardless of the patient's ability to control the drainage.

9 = Inadequate Documentation: Patient's bowel continence cannot be determined.

162. ***Mobility:*** Select the appropriate code to indicate the level of mobility on discharge from the hospital.

- 1 = Independent Ambulation



- 2 = Cane
- 3 = Walker
- 4 = Wheelchair
- 5 = Bedridden
- 8 = Other
- 9 = Unknown

163. **Discharge Disposition:** Indicate the patient's disposition at discharge.

- 1 = **Discharged to home:** Includes residence or group home.
- 2 = **Transfer to another hospital:** The patient was transferred to another short-term acute hospital.
- 3 = **Transfer to swing, SNF or ICF:** Patient was transferred to a freestanding or hospital based skilled nursing facility (SNF), swing bed for SNF care or an intermediate care facility (ICF).
- 4 = **Transfer to Rehabilitation Facility**
- 5 = **Transfer to other institution:** Facility other than an acute care hospital, SNF or swing bed.
- 6 = **Transfer to Home Health:** Patient was transferred to a home health service program.
- 7 = **Left Against Medical Advice:** Patient left without a physician's order or against medical advice.
- 8 = **Expired**
- 9 = **Unknown:** Unable to determine the patient's disposition at discharge.

164-165. **Final listing of diagnoses and procedures:**

Diagnoses/Procedures: If present, list all diagnoses and procedures for this hospital stay as shown on the attestation form. Admitting diagnosis may be abstracted from the face sheet. If only a narrative description is available, record "0" for the ICD-9-CM code.





# APPENDIX A

## ANESTHESIA TYPE

- 0 › ***None*** - No anesthesia used during this episode.
- 1 › ***General*** - Use of a general anesthetic.
- 2 › ***Spinal*** - Use of a spinal anesthetic.
- 3 › ***Epidural*** - Use of an epidural anesthetic.
- 4 › ***IV Sedation:*** - Use of monitored anesthetic care (MAC), IV medications or monitored anesthetic care (MAC).
- 5 › ***Local/Regional*** - Use of a local anesthetic (e.g., Novacaine, Lidocaine, Xylocaine) or regional block.
- 9 › ***Unknown*** - If you are unable to determine from the medical record the type of anesthesia administered during this operative episode.

If more than one type of anesthesia is used, the following hierarchy applies:

- general
- spinal
- epidural
- IV medication
- local/regional

For example, if the patient had both a general anesthetic and IV medication, record the general anesthetic.





## **APPENDIX B**

### **ANESTHESIA RISK**

- 1 > Anesthesia risk, ASA or physical status classification of Class 1.
- 1E > Anesthesia risk, ASA or physical status classification of Class 1 emergency.
- 2 > Anesthesia risk, ASA or physical status classification of Class 2.
- 2E > Anesthesia risk, ASA or physical status classification of Class 2 emergency.
- 3 > Anesthesia risk, ASA or physical status classification of Class 3.
- 3E > Anesthesia risk, ASA or physical status classification of Class 3 emergency.
- 4 > Anesthesia risk, ASA or physical status classification of Class 4.
- 4E > Anesthesia risk, ASA or physical status classification of Class 4 emergency.
- 5 > Anesthesia risk, ASA or physical status classification of Class 5.
- 5E > Anesthesia risk, ASA or physical status classification of Class 5 emergency.
- 9 > If you are unable to determine the anesthesia risk, ASA or physical status classification for this operative episode.

If there is conflicting information, use the following priority order:

- Anesthesia Record
- Pre-anesthesia H & P
- Operative Report
- Intraoperative Record
- Post Anesthesia Care Unit Record



# APPENDIX C

## PATHOLOGY FINDINGS

- (1) ***Tissue Removed:*** Include when there is documentation in the medical record that tissue removed during the surgical procedure was sent to pathology.
- (2) ***Inflammation:*** Includes descriptive terms ending in "itis" (e.g., cystitis, cholecystitis, prostatitis).
- (3) ***Infection:*** Includes infection, presence of a virus, bacteria, fungus, or parasites, or the descriptive terms gangrene, pus, necrosis or purulent.
- (4) ***Normal Tissue:*** Includes tissue that was normal. Do not select this option if the record documents inflammation, infection, benign or malignant tissue change.
- (5) ***Benign Tissue Change:*** Includes benign tissue change, degenerative changes, osteoarthritis, hyperplasia, fibrocystic, hypoplasia, atypical, adenoma, adipose tissue, scarring, adhesions, fibrosis or any tissue change which CANNOT be classified as inflammation, infection, malignant tissue change or normal.
- (6) ***Malignant Tissue Change:*** Includes any item which includes one of the following words: carcinoma, malignant, sarcoma, leukemia, lymphoma or malignant tumor type undetermined. This option is also to be selected when the record documents any of the following: malignant tissue change, cancerous, metastatic changes, multiple myeloma, extensive invasion of . . . , myeloproliferative, Hodgkins or adenocarcinoma.
- (7) ***Localized Tumor:*** Includes cancer with only local involvement, self-contained tumor, encapsulated tumor, in situ tumor or Dukes A. This option is also to be selected when the record documents cancer.
- (8) ***Localized Extension of Tumor:*** Includes solid tumors with regional involvement, tumor with involvement of nodes only or Dukes B.
- (9) ***Invasive/Disseminated:*** Includes cancer (CA), tumor or malignancy of carcinoma, sarcoma, malignant tumor type undetermined, melanoma or any term ending in sarcoma or carcinoma with metastasis, spread, extension, invasion or infiltration to any organ, bone, subcutaneous tissue, muscle, etc., or Dukes C or D.
- (10) ***Other findings:*** Include when the medical record adequately and clearly documents findings which do not fit in the categories listed above.
- (11) ***Pathology Report:*** Include when a pathology report is present in the medical record.



## APPENDIX D

***Gallstones in GB:*** Findings of gallstones, calculi or stones in the gallbladder or cholelithiasis.

***Gallstones in bile duct:*** Findings of gallstones, calculi or stones in the bile duct or cholelithiasis.

***Gallstones, location unspecified:*** Findings of gallstones, calculi or stones BUT DOES NOT specify a location. When a location is specified which fits one of the above categories, select "NO" for this question.

***Sludge:*** Findings of sludge or gravel.

***Non-Visualization:*** Includes inability to visualize the gallbladder, bile ducts or contents.

***Thickened wall:*** Includes presence of a thickened wall in the gallbladder.

***Non-functional Gallbladder:*** Includes non-functional gallbladder.

***Other findings:*** Findings of the test are adequately and clearly documented, but do not fit into any of the above categories.





# APPENDIX E

## Antibiotic Codes

<u>Antibiotics:</u>	<u>Code Number:</u>	<u>Common Trade Name:</u>
Acyclovir	59	Zovirax
Amikacin	01	
Amoxicillin or Ampicillin (Plain)	02	Amoxil, Omnipen
Amoxicillin with Clavulanate	03	Augmentin
Amphotericin B	04	Fungizone
Ampicillin with Sulbactam	05	Unasyn
Amantidine	06	Symmetrel
Aztreonam	07	Azactam
Azithromycin	08	Zithromax
Azt/Zidovudine, Ddi, other Anti-Hiv Drugs	60	Retrovir
Cefaclor	09	Ceclor
Cefdroxil	10	Duricef
Cefamandole	11	Mandol
Cefazolin	12	Ancef, Kefzol
Cefixime	13	Suprax
Cefmetazole	14	Zefazone
Cefonicid	15	Monocid
Cefoperazone	16	Cefobid
Cefotaxime	17	Claforan
Cefotetan	18	Cefotan
Cefoxitin	19	Mefoxin
Cefpodoxime	20	Vantin
Cefprozil	21	Cefzil
Ceftazidime	22	Ceptaz, Fortaz Pentacef, Tazicef Tazidime
Ceftizoxime	23	Cefizox
Ceftriaxone	24	Rocephin
Cefuroxime	25	Ceftin, Kefurox, Zinacef
Cephalexin	26	Biocef, Keflex
Cephapirin	65	Cefadyl
Cephradine	27	Anspor, Velsof
Cephalosporin, other	28	
Chloramphenicol	29	Chloromycetin
Ciprofloxacin	30	Cipro
Clarithromycin	31	Biacin
Clindamycin	32	Cleocin
Dicloxacillin/Cloxacillin	33	Pathocil
Erythromycin	34	E.E.S., Ilosone
Ethambutol	35	Myambutol
Fluconazole	55	Diflucan
Flucytosine	56	Ancobon
Foscarnet	61	Foscavir
Ganciclovir	62	Cytovene



**APPENDIX E**  
**Antibiotic Codes**  
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<u>Antibiotics:</u>	<u>Code Number:</u>	<u>Common Trade Name:</u>
Gentamicin	36	Garamycin
Imipenem-Cilastin	37	Primaxin
Isoniazid	38	Inh
Ketoconazole	57	Nizoral
Loracarbef	39	Lorabid
Metronidazole	40	Flagyl
Mezlocillin	41	Mezlin
Miconazole	58	Monistat
Nafcillin/Methicillin	42	Unipen
Norfloxacin	66	Noroxin
Ofloxacin	43	Floxin
Penicillin	44	Bicillin, Wycillin
Pentamine	63	Nebupent, Pentam
Piperacillin	45	Pipracil
Ribavirin	64	Virazole
Rifampin	46	
Streptomycin	47	
Tetracycline Drugs including Doxycycline, Minocycline, Oxytetracycline	48	Achromycin, Minocin, Terramycin, Vibramycin
Ticarcillin	49	Ticar
Ticarcillin/Clavulanate	50	Timentin
Tobramycin	51	Nebcin
Trimethoprim/Sulfa	52	Bactrim, Septra
Vancomycin	53	Vancocin
Sterile Piperacillin Sodium & Tazobactam Sodium	67	Zosyn
Other	88	
Unknown	99	



# APPENDIX F

## ASPIRIN

	<u>Code Number:</u>
Acetyl Salicylic Acid	01
Acetylasalicylic Acid, Buffered	11
Alka-Seltzer	12
ASA	02
ASA Enseals	13
Anacin	03
Arthritis Pain Formula	14
Arthritis Strength Bufferin	15
Asadrin C-20	16
Ascriptin Extra Strength	17
Asen	18
Asperbuf	19
Aspergum	20
Aspirin	21
Aspirin, Caffeine	04
Aspirmox	22
Ascriptin	05
Axotal	23
8 hour Bayer	06
Bayer Children's Aspirin	24
Bayer Plud	25
Buff-A	26
Buffaprin	27
Buffered Aspirin	28
Bufferin	07
Bufferin Arthritis Strength	29
Bufferin Extra Strength	30
Buffex	31
Buffinol	32
Cama Arthritis Strength	33
Corphyen	34
Easprin	35
ECASA	36
Ecotrin	08
Ecotrin ECA	37
Ecotrin Maximum Strength	38
Empirin	09
Encaprin	39
Equagesic	40
Excedrin	41
Excedrin ES	42

## THROMBOLYTICS

	<u>Code Number:</u>
Abbokinase	01
Activase	02
Anistreplase	03
Alteplase recombinant (TPA)	04
Eminase	05
Kabikinase	06
Streptase	07
Streptokinase	08
Tissue Plasminogen Activator	09
Urokinase	10
Other	88
Unknown	99



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**ASPIRIN (Cont'd)**

Code Number:

Excedrin Extra Strength	43
Extra Strength Bufferin	44
Lortab ASA	45
Magnaprin	46
Magnaprin Arthritis Strength	47
Maprin	48
Maprin I-B	49
Maximum Bayer Aspirin	50
Maximun Strength Anacin	51
Measurin	52
Midol	53
Norgesic	54
Norgesic Forte	55
Norwich Aspirin	56
Novasen	57
Riphen-10	58
St. Joseph Adult chewable Aspirin	59
St. Joseph Lo Dose Aspirin	10
St. Joseph Children's Aspirin	60
Supasa	61
Triaphen-10	62
Zorprin	63
Other	88
Unknown	99





NSAIDSCode Number:

Advil	01
Aleve	66
Alka-Butazolidin	02
Alkabutazone	03
Amersol	04
Anaprox	46
Anaprox DS	47
Ansaid	53
Apo-Naproxen	05
Azolid	06
Butazolidin	07
Carpfen	08
Clinoril	09
Disalcid or Salsalate	61
Dolobid	54
Feldene	10
Fenoprofen Calcium	11
Haltran	12
Gold	65
IBU	48
Ibuprin	13
Ibuprofen	14
Ifen	55
Inda Meth	62
Indocid	15
Indocin	16
Indocin SR	56
Indo-Lemmon	57
Indomed	17
Indomethacin	18
Keptofren	19
Lodine	49
Keptofren	63
Meclofenamate	20
Meclomen	21
Mediprin	22
Mefenamic Acid	23
Midol	24
Motrin	25
Nalfon	27
Naprosyn	26
Naproxen	28
Naxen	29
Novomethacin	30
Novonaprox	31
Nuprin	32
Orudis	33
Oruvail	50

CYTOXINSCode Number:

Adriamycin	01
BiCNU	02
CeeNU	03
Cerubidine	04
CYC	28
Cyclophosphamide	08
Cytosar-U	05
Cytosan	29
Cytosan Lyophilized	30
Cytosin	06
Doxorubicin HCL	07
Efudex	08
Emcyt	09
FUDR	10
Fluorouracil	11
Hydrea	12
IFEX	13
Intron A	14
Matulane	15
Methotrexate	16
Mithracin	17
Mutamycin	18
Myleran	19
Neosar	20
Novantrone	21
Paraplatin	22
Platinol	23
Procytox	31
Purinethol	24
Roferon-A	25
Rubex	26
Thioguanine	27
Other	88
Unknown	99



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**NSAIDS (Cont'd)**

Code Number:

Oxyphenbutazone	34
Phenylbutazone	35
Plaquenil	66
Piroxicam	36
Ponstan	37
Ponstel	38
Rimadyl	39
Relafen	51
Rufen	40
Sulindac	41
Tolectin	42
Tolectin DS	58
Tolectin Sodium	59
Tolmetin Sodium	43
Toradol	52
Trendar	44
Trendar Rimadyl	64
Voltaren	60
Zendole	45
Other	88
Unknown	99



## APPENDIX G

### STEROID

### Code Number:

A-Hydrocort	01
Amcort	02
Apo-Prednisone	03
Aristocort Forte	04
Azmacort	05
B.S.P.Celestone Phosphate	06
Beclomethasone Dipropionate	07
Beclovent	08
Beclovent Rotacaps	09
Betamethasone	10
Betamethasone Acetate and Betamethasone Sodium Phosphate	12
Betamethasone Sodium Phosphate	13
Bethamethasone Disodium Phosphate	14
Betnelan	15
Betnesol	16
Biosone	17
Cenocort A	18
Cenocort Forte	19
Cinoide	20
Cortalone	21
Cortef	22
Cortef Acetate	23
Cortisone Acetate	24
Cortistan	25
Cortone	26
Decadron	27
Delta-Cortef	28
Deltasone	29
DepMedalone	30
Depoject	31
DepoMedrol	32
Depopred	33
DepoPredate	34
Deronil	35
Desoxycorticosterone Acetate	36
Desoxycorticosterone Pivalate	37
Dexametdasone	38
Dexamethasone Acetate	39
Dexamethasone Intensol	40
Dexamethasone Sodium Phosphate	41
Dexasone	42
Dexone	43
Duralone	44
Durameth	45
Hydrocortisone Sodium Phosphate	52
Hydrocortisone Sodium Succinate	53
Hydrocortone	54
Hydrocortone Acetate	55
Hydrocortone Phosphate	56





## APPENDIX G

Kenacort	57
Kenaject'	58
Kenalog	59
Kenalone	60
Lone Acetonide	61
M-Prednisol	62
Medralone	63
Medrol	64
Medrol Enpak	65
Medrone	66
Methylone	67
Methylprednisolone	68
Methylprednisolone Acetate	69
Methylprednisolone Socium Succinate	70
Meticorten	71
Mymethasone	72
Novoprednisolone	73
Orasone	74
Panasol	75
Paramethasone Acetate	76
Percorten Acetate	77
Predalone	78
Predate	79
Prednicen-M	80
Prednisone	81
Prednisone Acetate	82
Prelestone	83
Prelone	84
Selestoject	85
Solu-Cortef	86
Sterapred	87
Tracilon	89
Tramacort	90
Triam -A	91
Triamico	92
Triamicolone	93
Triamicolone Diacetate	94
Triamicolone Hexacetonide	95
Vanceril	96
Winpred	97
Other	88
Unknown	99



## APPENDIX G

### COUMADIN

Carfin	01
Coumadin	02
Panwarfin	03
Sofarin	04
Warfilone	05
Warnerin Sodium	06
Warfarin Sodium	07
Other	88
Unknown	99

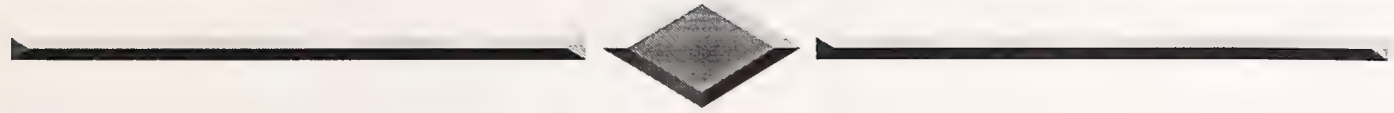
### HEPARIN

Heparin Calcium (Calciparine)	01
Heparin Sodium	02
Hepalean	03
Liquaemin Sodium	04
Liquaeminsodium Preservative	05
Free	-
Minihep	06
Lovenox (Enoxaparin)	07
Other	88
Unknown	99



**Elective Total Hip Replacement**  
**Worksheet**

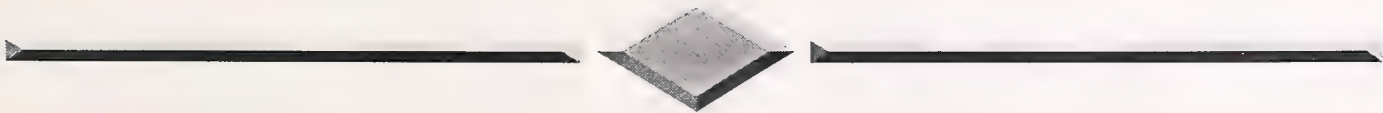




**MINNESOTA PHOS**

**ELECTIVE TOTAL HIP REPLACEMENT**

**WORKSHEET**







**MINNESOTA PHOS  
ELECTIVE TOTAL HIP REPLACEMENT  
Worksheet**

PATIENT DEMOGRAPHICS

phosid	1.	PHOS ID#:	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
hic	2.	HIC #:	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
mr	3.	Medical Record #:	<input type="text"/>
fn, ln	4.	Patient Name:	<input type="text"/>
prov	5.	Provider Number:	<input type="text"/>
hospn	6.	Hospital Name:	<input type="text"/>
hospad	7.	Hospital Address:	<input type="text"/> <input type="text"/> <input type="text"/>
admitd	8.	Date of Admission:	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> MM DD YY
dcd	9.	Date of Discharge:	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> MM DD YY
dob	10.	Date of Birth:	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> MM DD YYYY
pproc	11.	Pri-Proc:	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
state	12.	State:	<input type="text"/> <input type="text"/>
gender	13.	Gender:	<input type="text"/> 1 = Male 2 = Female 9 = Unknown
ins	14.	Insurance:	<input type="text"/> 1 = Medicaid 2 = Medigap 3 = Other 4 = No Other Insurance 9 = Inadequate Documentation



Minnesota PHOS  
Elective Total Hip Replacement

race 15. Race: ☐ 1 = White 5 = Native American  
2 = Hispanic 8 = Other  
3 = Black 9 = Unknown  
4 = Asian

reab 16. Re-abstract: ☐☐☐

abid 17. Ab Id: ☐☐☐

RECORD VERIFICATION

pdx Is the principal diagnosis criteria met? ☐ 0 = No  
1 = Yes

pprcr Is the principal procedure criteria met? ☐ 0 = No  
1 = Yes

app Approval to proceed? ☐ 0 = No  
1 = Yes

If an exclusion exists and approval to proceed has not been verified, stop here. If no exclusion or you have approval to proceed, continue abstraction.

USUAL LEVEL OF FUNCTION

→  
18. Admission Height: ☐☐☐. ☐☐ ☐ adht adhtu  
1 = inches  
2 = cm  
9 = Unknown

→  
19. Admission Weight: ☐☐☐. ☐ adwt adwtu  
1 = lbs  
2 = kilos  
9 = Unknown

blcont 20. Bladder Continence: ☐ 1 = Continent  
2 = Incontinent  
3 = Dialysis/No urine output  
9 = Inadequate Documentation

bowcont 21. Bowel Continence: ☐ 1 = Continent  
2 = Incontinent  
3 = Bowel Ostomy  
9 = Inadequate Documentation



Minnesota PHOS  
*Elective Total Hip Replacement*

**mobil** 22. Mobility:

☐

1 = Independent  
ambulation  
2 = Cane  
3 = Walker

4 = Wheelchair  
5 = Bedridden  
8 = Other  
9 = Unknown

History of Substance Use

**hsmoke** 23. Does patient have a smoking history? ☐

0 = No  
1 = Yes  
9 = Unknown

**halcoho** 24. Chronic Alcohol Abuser? ☐

0 = No  
1 = Yes  
9 = Unknown

HISTORY AND PHYSICAL

Neurological

Neurological History

**nhhead** 25. History of Headache ☐

0 = No  
1 = Yes  
9 = Unknown

**ncog** 26. Cognitive Deficit/Mental Retardation ☐

0 = No  
1 = Yes  
9 = Unknown

**ncva** 27. History of CVA ☐

0 = No  
1 = Yes  
9 = Unknown

**ncvahem** 28. CVA known to be hemorrhagic ☐

0 = No  
1 = Yes  
9 = Unknown

Current Neurological Disease

**unsynco** 29. Syncope ☐

0 = No  
1 = Yes  
9 = Unknown

**uncvati** 30. Cerebrovascular Accident/TIA ☐

0 = No  
1 = Yes  
9 = Unknown





Minnesota PHOS  
*Elective Total Hip Replacement*

Cardiovascular

Cardiac Disease History

charrhy 31. Arrhythmia

☐

0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to #32.  
If answer is "YES", complete this section.

charsvt a. Sustained Ventricular  
Tachycardia

☐

0 = No  
1 = Yes  
9 = Unknown

charhb2 b. Heart Block, 2nd Degree

☐

0 = No  
1 = Yes  
9 = Unknown

charhb3 c. Heart Block, 3rd degree

☐

0 = No  
1 = Yes  
9 = Unknown

charsa d. Supraventricular  
Arrhythmia

☐

0 = No  
1 = Yes  
9 = Unknown

charva e. Ventricular Arrhythmia

☐

0 = No  
1 = Yes  
9 = Unknown

charsnd f. Sinus Node Dysfunction

☐

0 = No  
1 = Yes  
9 = Unknown

charnbt g. Nonmalignant Bradycardia  
or Tachyarrhythmia

☐

0 = No  
1 = Yes  
9 = Unknown

chhtn 32. Hypertension

☐

0 = No  
1 = Yes  
9 = Unknown

chami 33. MI

☐

0 = No  
1 = Yes  
9 = Unknown



Minnesota PHOS  
*Elective Total Hip Replacement*

chang 34. Angina

☐

0 = No  
1 = Yes  
9 = Unknown

chvalv 35. Valvular Disease

☐

0 = No  
1 = Yes  
9 = Unknown

chchf 36. Congestive Heart Failure

☐

0 = No  
1 = Yes  
9 = Unknown

History of Cardiovascular Surgery

chscaa 37. Coronary Artery Angioplasty

☐

0 = No  
1 = Yes  
9 = Unknown

chscabg 38. CABG

☐

0 = No  
1 = Yes  
9 = Unknown

chsintr 39. Intracardiac (valve, aneurysm)

☐

0 = No  
1 = Yes  
9 = Unknown

chspvs 40. Peripheral Vascular Surgery

☐

0 = No  
1 = Yes  
9 = Unknown

Current CV

ucvcp 41. Chest Pain (steady)

☐

0 = No  
1 = Yes  
9 = Unknown

ucvarrh 42. Arrhythmia

☐

0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to #43.  
If answer is "YES", complete this section.

ucsvt a. Sustained Ventricular  
Tachycardia

☐

0 = No  
1 = Yes  
9 = Unknown



# Minnesota PHOS

### *Elective Total Hip Replacement*

<b>ucvhhb2</b>	<b>b.</b>	<b>Heart Block, 2nd Degree</b>	<input type="checkbox"/>	0 = No
				1 = Yes
				9 = Unknown

<b>ucvhhb3</b>	<b>c.</b>	<b>Heart Block, 3rd degree</b>	<input type="checkbox"/>	0 = No
				1 = Yes
				9 = Unknown

<b>ucvsa</b>	<b>d.</b>	Supraventricular Arrhythmia	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
--------------	-----------	--------------------------------	--------------------------	----------------------------------

ucvva	e.	Ventricular Arrhythmia	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
1	1	1	1	1
2	2	2	2	2
3	3	3	3	3
4	4	4	4	4
5	5	5	5	5
6	6	6	6	6
7	7	7	7	7
8	8	8	8	8
9	9	9	9	9
10	10	10	10	10
11	11	11	11	11
12	12	12	12	12
13	13	13	13	13
14	14	14	14	14
15	15	15	15	15
16	16	16	16	16
17	17	17	17	17
18	18	18	18	18
19	19	19	19	19
20	20	20	20	20
21	21	21	21	21
22	22	22	22	22
23	23	23	23	23
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81	81	81	81	81
82	82	82	82	82
83	83	83	83	83
84	84	84	84	84
85	85	85	85	85
86	86	86	86	86
87	87			

ucvsn	f.	Sinus Node Dysfunction	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown

<b>ucvnb</b>	g.	Nonmalignant Bradycardia or Tachyarrhythmia	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
--------------	----	--	--------------------------	----------------------------------

**ucvshoc 43.** Shock ☐ 0 = No  
1 = Yes  
9 = Unknown

[illegible]

ucvped 45.	Pulmonary Edema	<input type="checkbox"/>	0 = No
			1 = Yes
			9 = Unknown

**ucvpede 46.**      Peripheral Edema      ☐      0 = No  
1 = Yes  
9 = Unknown

**ucvpd** · 47. Pulse Deficit ☐ 0 = No  
1 = Yes  
9 = Unknown

## Vascular Disease

**cvcvd** 48. Central Vascular Disease ☐ 0 = No  
1 = Yes  
9 = Unknown



Minnesota PHOS  
Elective Total Hip Replacement

cvpvd 49. Peripheral Vascular Disease

☐

0 = No  
1 = Yes  
9 = Unknown

Pulmonary

Pulmonary History

phcpd 50. Pulmonary Disease

☐

0 = No  
1 = Yes  
9 = Unknown

phps 51. Pulmonary Surgery

☐

0 = No  
1 = Yes  
9 = Unknown

Current Pulmonary

upcohem52. Cough - Hemoptysis

☐

0 = No  
1 = Yes  
9 = Unknown

upcoprod53. Cough - Productive

☐

0 = No  
1 = Yes  
9 = Unknown

upconon54. Cough - Non-productive

☐

0 = No  
1 = Yes  
9 = Unknown

uplb 55. Labored Breathing

☐

0 = No  
1 = Yes  
9 = Unknown

History of Cancer

hca 56. Cancer

☐

0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to #57.  
If answer is "YES", complete this section.

hcatype a. Specify Type of Cancer: \_\_\_\_\_

hcastag b. Indicate Stage

☐

1 = Local  
2 = Regional  
3 = Metastatic  
9 = Unknown





ADMISSION MEDICATION HISTORY

Medication History at Time of Admission

mhaasa 57. ASA

☐

0 = No  
1 = Yes  
9 = Unknown

mhaanti 58. Anticoagulants

☐

0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to #59.  
If answer is "YES", complete this section.

mhacoum a. Coumadin

☐

0 = No  
1 = Yes  
9 = Unknown

mhahepa b. Heparin

☐

0 = No  
1 = Yes  
9 = Unknown

mhansai 59. NSAIDS

☐

0 = No  
1 = Yes  
9 = Unknown

mhacyto 60. Cytotoxins

☐

0 = No  
1 = Yes  
9 = Unknown

mhafter 61. Steroids

☐

0 = No  
1 = Yes  
9 = Unknown

Abdominal

Abdominal Disease

agid 62. Upper GI Disease

☐

0 = No  
1 = Yes  
9 = Unknown

agibl 63. GI Bleeding

☐

0 = No  
1 = Yes  
9 = Unknown



Minnesota PHOS  
*Elective Total Hip Replacement*

Current Abdominal

uamass 64. Abdominal Mass ☐ 0 = No  
1 = Yes  
9 = Unknown

uadist 65. Abdominal Distention ☐ 0 = No  
1 = Yes  
9 = Unknown

uarectb 66. Rectal Blood ☐ 0 = No  
1 = Yes  
9 = Unknown

uargr 67. Abdominal Rigidity/Guarding/  
Rebound ☐ 0 = No  
1 = Yes  
9 = Unknown

uascite 68. Ascites ☐ 0 = No  
1 = Yes  
9 = Unknown

History of Autoimmune Disease

had 69. Autoimmune Disease ☐ 0 = No  
1 = Yes  
9 = Unknown

History Major Organ Surgery

hos 70. Major Organ Removal ☐ 0 = No  
1 = Yes  
9 = Unknown

hosliv 71. Liver Transplant ☐ 0 = No  
1 = Yes  
9 = Unknown

History of Endocrine/Diabetes

hedced 72. Chronic Endocrine Disease ☐ 0 = No  
1 = Yes  
9 = Unknown

heddm 73. Diabetes ☐ 0 = No  
1 = IDDM  
2 = NIDDM  
9 = Unknown



Minnesota PHOS  
*Elective Total Hip Replacement*

hedshiv 74. HIV+, Symptomatic ☐ 0 = No  
1 = Yes  
9 = Unknown

hedahiv 75. HIV+, Asymptomatic ☐ 0 = No  
1 = Yes  
9 = Unknown

hedcwl 76. Chronic Weight Loss ☐ 0 = No  
1 = Yes  
9 = Unknown

hedcsi 77. Chronic Systemic Infection ☐ 0 = No  
1 = Yes  
9 = Unknown

Urological History

huropf 78. Flank Pain ☐ 0 = No  
1 = Yes  
9 = Unknown

hurocrf 79. Chronic Renal Failure ☐ 0 = No  
1 = Yes  
9 = Unknown

Musculoskeletal

History of Musculoskeletal Surgery/Pain

khipamp80. History of Amputation ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to #81.  
If answer is "YES", complete this section.

khipade Indicate where amputation occurred: \_\_\_\_\_

khipsx 81. History of Hip Surgery ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to #82.  
If answer is "YES", complete this section.

khipext Indicate extremity: ☐ 1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown





Minnesota PHOS  
*Elective Total Hip Replacement*

khiprep

a. Type of Replacement:

☐

1 = Internal Fixation  
2 = Cup Arthroplasty  
3 = Osteotomy  
4 = Arthrodesis  
5 = Gridlestone  
6 = Femoral Head Prosthesis (Hemiarthroplasty)  
7 = Double cup (Surface Replacement)  
8 = Total Hip Replacement  
9 = Unknown

khipnum

b. Indicate number of previous  
total hip replacements:

☐☐

kknrep 82.

History of Knee Replacement

☐

0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to #83.  
If answer is "YES", complete this section.

kknext

Indicate extremity:

☐

1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown

kbp

83.

Back Pain

☐

0 = No  
1 = Yes  
9 = Unknown

Current Musculoskeletal

Arthritis

ukarth 84.

Arthritis

☐

0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to #85.  
If answer is "YES", complete this section.

ukrhart

a. Rheumatoid Arthritis

☐

0 = No  
1 = Yes  
9 = Unknown

ukjart

b. Juvenile Rheumatoid Arthritis

☐

0 = No  
1 = Yes  
9 = Unknown

uk1oste

c. Primary Osteoarthritis

☐

0 = No  
1 = Yes  
9 = Unknown



### *Elective Total Hip Replacement*

**uk2oste**      d.    Secondary Osteoarthritis    ☐    0 = No  
                                1 = Yes  
                                9 = Unknown

<b>uknqost</b>	<b>e.</b>	<b>Osteoarthritis, not qualified</b>	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
----------------	-----------	--------------------------------------	--------------------------	----------------------------------

<b>ukspod</b>	f.	Spondylitis	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
---------------	----	-------------	--------------------------	----------------------------------

<b>ukothar</b>	g.	Other Arthritis	<input type="checkbox"/>	0 = No
				1 = Yes
				9 = Unknown

### Arthritis Outside Operated Hip

**ukhout 85.** Arthritis outside operated hip ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is “NO” or “UNKNOWN”, skip to #86.  
If answer is “YES”, complete this section.

<b>ukhcont</b>	<b>a.</b>	Arthritis in hip contralateral to operated hip	<input type="checkbox"/>	0 = No
				1 = Yes
				9 = Unknown

<b>uknipsi</b>	<b>b.</b>	Arthritis in knee ipsilateral to operated hip	<input type="checkbox"/>	0 = No
				1 = Yes
				9 = Unknown

<b>ukback</b>	<b>c.</b>	<b>Arthritis in back</b>	<input type="checkbox"/>	0 = No
				1 = Yes
				9 = Unknown

ukknent	d.	Arthritis in knee contralateral to operated hip	<input type="checkbox"/>	0 = No
				1 = Yes
				9 = Unknown

**uknunar** e. Arthritis in knee (unspecified) ☐ 0 = No  
1 = Yes  
9 = Unknown



Minnesota PHOS  
Elective Total Hip Replacement

Range of Motion

ukunrom86. Type Unspecified ☐ 0 = No  
1 = Yes  
9 = Unknown

ukpflx a. Permanent Flexion ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to #86b.  
If answer is "YES", complete this section.

ukpfext (1) Indicate extremity: ☐ 1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown

ukpflo (2) Low # of Range:

ukpfhi (3) High # of Range:

ukflxd b. Flexion in Degrees: ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to #86c.  
If answer is "YES", complete this section.

ukflo (1) Low # of Range

ukfhi (2) High # of Range

ukabdd c. Abduction in Degrees ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to #86d.  
If answer is "YES", complete this section.

ukabdlo (1) Low # of Range

ukabdhi (2) High # of Range

ukaddd d. Adduction in Degrees ☐ 0 = No  
1 = Yes  
9 = Unknown



Minnesota PHOS  
Elective Total Hip Replacement

If answer is "NO" or "UNKNOWN", skip to #86e.  
If answer is "YES", complete this section.

ukaddlo (1) Low # of Range

ukaddhi (2) High # of Range

ukere e. External Rotation in  0 = No  
Extension 1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to #86f.  
If answer is "YES", complete this section.

ukerelo (1) Low # of Range

ukerehi (2) High # of Range

ukire f. Internal Rotation in Extension  0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to #87.  
If answer is "YES", complete this section.

ukirelo (1) Low # of Range

ukirehi (2) High # of Range

87. Indicate if there is documentation in the medical record of the following:

ukwalk a. During the two weeks prior to surgery,

did the patient walk:  1 = No more than a step or two  
2 = Across the room  
3 = Less than one block  
4 = More than one block  
5 = More than ten blocks  
6 = More than one mile  
7 = Never did, too painful  
9 = Unknown

ukwktrb b. Prior to surgery, did the patient

have trouble:  1 = Climbing several flights of stairs  
2 = Climbing one flight of stairs  
3 = Bending, kneeling or stooping  
4 = Putting on shoes, socks, or stockings  
9 = Unknown





Minnesota PHOS  
*Elective Total Hip Replacement*

c. Prior to surgery, did the patient have hip related pain while:

ukhpwlk 1) Walking ☐ 0 = No  
 1 = Yes  
 9 = Unknown

ukhpsit 2) Sitting ☐ 0 = No  
 1 = Yes  
 9 = Unknown

ukhpcl 3) Climbing stairs ☐ 0 = No  
 1 = Yes  
 9 = Unknown

ukhpky 4) Lying in bed at night ☐ 0 = No  
 1 = Yes  
 9 = Unknown

ukhpany 5) At any other time ☐ 0 = No  
 1 = Yes  
 9 = Unknown

ukhpunk 6) Unknown ☐ 0 = No  
 1 = Yes

d. Prior to surgery, did the patient have pain:

ukpkip 1) In hip ☐ 0 = No  
 1 = Yes  
 9 = Unknown

ukpthgh 2) In thigh ☐ 0 = No  
 1 = Yes  
 9 = Unknown

ukpbut 3) In buttocks ☐ 0 = No  
 1 = Yes  
 9 = Unknown

ukpkn 4) In knee ☐ 0 = No  
 1 = Yes  
 9 = Unknown

ukpunk 5) Unknown ☐ 0 = No  
 1 = Yes



Minnesota PHOS  
Elective Total Hip Replacement

LABORATORY TESTS

Hematology

→ 88. Hematocrit (HCT)  
  
Preoperative

**lhctpr**  
(0 = None)

□□%

**lhctpd**  
Date

□□-□□-□□  
M M D D Y Y

**lhctpa**  
Abnormal

□

1 = Normal  
2 = BNL  
3 = ANL  
4 = Noted to  
be Abnormal  
9 = UNK

→ 89. Hemoglobin (HGB)  
  
Preoperative

**lhgbpr**  
(0 = None)

□□.□

**lhgbpc**  
Code

□

1 = GM/DL  
2 = G  
3 = MMOL/L  
8 = Other  
9 = Unknown

**lhgbpd**  
Date

□□-□□-□□  
M M D D Y Y

**lhgbpa**  
Abnormal

□

1 = Normal  
2 = BNL  
3 = ANL  
4 = Noted to  
be Abnormal  
9 = UNK

→ 90. WBC  
  
a. Preoperative

**lhwbpr**  
(0 = None)

□□□□□

**lhwbpd**  
Date

□□-□□-□□  
M M D D Y Y

**lhwbpa**  
Abnormal

□

1 = Normal  
2 = BNL  
3 = ANL  
4 = Noted to  
be Abnormal  
9 = UNK

→  
  
b. Postoperative

**lhwbcor**  
(0 = None)

□□□□□

**lhwbcod**  
Date

□□-□□-□□  
M M D D Y Y

**lhwbcoa**  
Abnormal

□

1 = Normal  
2 = BNL  
3 = ANL  
9 = UNK

→  
  
c. Final

**lhwbfr**  
(0 = None)

□□□□□

**lhwbfd**  
Date

□□-□□-□□  
M M D D Y Y

**lhwbfa**  
Abnormal

□

1 = Normal  
2 = BNL  
3 = ANL  
9 = UNK



Minnesota PHOS  
Elective Total Hip Replacement

→ 91. Prothrombin Time (PT)

Preoperative

lhptpr  
(0 = None)

□□.□□

lhptpd  
Date

□□-□□-□□  
M M D D Y Y

lhptpa  
Abnormal

□

1 = Normal  
2 = BNL  
3 = ANL  
4 = Noted to  
be Abnormal  
9 = UNK

→ 92. Partial thromboplastin time (PTT)

Preoperative

lhpttpr  
(0 = None)

□□.□

lhpttpd  
Date

□□-□□-□□  
M M D D Y Y

lhpttpa  
Abnormal

□

1 = Normal  
2 = BNL  
3 = ANL  
4 = Noted to  
be Abnormal  
9 = UNK

Urinalysis

→ 93. WBC

a. Preoperative

rwbcpr

□

0 = Not done  
1 = Negative  
2 = Positive  
9 = Unknown

rwbcpd

□□-□□-□□  
M M D D Y Y

→ b. Interim

rwbcor

□

0 = Not done  
1 = Negative  
2 = Positive  
9 = Unknown

rwbcod

□□-□□-□□  
M M D D Y Y

→ c. Final

rwbcfr

□

0 = Not done  
1 = Negative  
2 = Positive  
9 = Unknown

rwbcfd

□□-□□-□□  
M M D D Y Y

→ 94. Bacteria

a. Postoperative

rbacor

□

0 = Not done  
1 = Negative  
2 = Positive  
9 = Unknown

rbacod

□□-□□-□□  
M M D D Y Y

→ b. Final

rbacfr

□

0 = Not done  
1 = Negative  
2 = Positive  
9 = Unknown

rbacfd

□□-□□-□□  
M M D D Y Y





Minnesota PHOS  
Elective Total Hip Replacement

Microbiology

→	95.	Abscess	<b>bcessor</b>	<b>bcessod</b>
	a.	Postoperative	<input type="text"/> 0 = No Culture 1 = No Growth 2 = Positive 3 = Contaminant 9 = Unknown	<input type="text"/> - <input type="text"/> - <input type="text"/> MM DD YY
→	b.	Final	<b>bcessfr</b> <input type="text"/> 0 = No Culture 1 = No Growth 2 = Positive 3 = Contaminant 9 = Unknown	<b>bcessfd</b> <input type="text"/> - <input type="text"/> - <input type="text"/> MM DD YY
→	96.	Blood	<b>bblor</b>	<b>bblod</b>
	a.	Postoperative	<input type="text"/> 0 = No Culture 1 = No Growth 2 = Positive 3 = Contaminant 9 = Unknown	<input type="text"/> - <input type="text"/> - <input type="text"/> MM DD YY
→	b.	Final	<b>bblrf</b> <input type="text"/> 0 = No Culture 1 = No Growth 2 = Positive 3 = Contaminant 9 = Unknown	<b>bblfd</b> <input type="text"/> - <input type="text"/> - <input type="text"/> MM DD YY
→	97.	Sputum	<b>bsputor</b>	<b>bsputod</b>
	a.	Postoperative	<input type="text"/> 0 = No Culture 1 = No Growth 2 = Positive 3 = Contaminant 9 = Unknown	<input type="text"/> - <input type="text"/> - <input type="text"/> MM DD YY
→	b.	Final	<b>bsputfr</b> <input type="text"/> 0 = No Culture 1 = No Growth 2 = Positive 3 = Contaminant 9 = Unknown	<b>bsputfd</b> <input type="text"/> - <input type="text"/> - <input type="text"/> MM DD YY
→	98.	Urine	<b>burinor</b>	<b>burinod</b>
	a.	Postoperative	<input type="text"/> 0 = No Culture 1 = < 100,000 2 = ≥100,000 3 = Contaminant 8 = No Growth 9 = Unknown	<input type="text"/> - <input type="text"/> - <input type="text"/> MM DD YY



Minnesota PHOS  
Elective Total Hip Replacement

→

b. Final

**burinfr**

0 = No Culture  
1 = < 100,000  
2 = ≥100,000  
3 = Contaminant  
8 = No Growth  
9 = Unknown

**burinfd**

--  
M M D D Y Y

→

99. Wound

a. Intraoperative

**bwndir**

0 = No Culture  
1 = No Growth  
2 = Positive  
3 = Contaminant  
9 = Unknown

**bwndid**

--  
M M D D Y Y

→

b. Postoperative

**bwndor**

0 = No Culture  
1 = No Growth  
2 = Positive  
3 = Contaminant  
9 = Unknown

**bwndod**

--  
M M D D Y Y

→

c. Final

**bwndfr**

0 = No Culture  
1 = No Growth  
2 = Positive  
3 = Contaminant  
9 = Unknown

**bwndfd**

--  
M M D D Y Y

→

100. CSF/Joint Fluid

a. Postoperative

**bcsfjor**

0 = No Culture  
1 = No Growth  
2 = Positive  
3 = Contaminant  
9 = Unknown

**bcsfjod**

--  
M M D D Y Y

→

b. Final

**bcsfjfr**

0 = No Culture  
1 = No Growth  
2 = Positive  
3 = Contaminant  
9 = Unknown

**bcsfjfd**

--  
M M D D Y Y

DIAGNOSTIC TESTS  
Preoperative Chest X-ray

**dpcht** 101. Chest X-ray

0 = No  
1 = Yes  
9 = Unknown

If answer is “NO” or “UNKNOWN”, skip to #102.  
If answer is “YES”, complete this section.



Minnesota PHOS  
Elective Total Hip Replacement

dpchtd a. Date   -   -    
MM DD YY

dpchtn b. Normal  0 = No  
1 = Yes  
9 = Unknown

If answer is "YES" or "UNKNOWN", skip to #102.  
If answer is "NO" continue.

dpchti c. Infiltrate  0 = No  
1 = Yes  
9 = Unknown

dpchtpf d. Pleural Effusion  0 = No  
1 = Yes  
9 = Unknown

dpchtpn e. Pneumothorax  0 = No  
1 = Yes  
9 = Unknown

dpchtpe f. Pulmonary Edema  0 = No  
1 = Yes  
9 = Unknown

dpchtat g. Atelectasis  0 = No  
1 = Yes  
9 = Unknown

dpchthf h. Congestive Heart Failure  0 = No  
1 = Yes  
9 = Unknown

KUB/Abdominal X-ray

dpkub 102. Preoperative KUB/Abdominal X-ray  0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #103.  
If answer is "YES", was it normal?

dpkubn Normal  0 = No  
1 = Yes  
9 = Unknown



Minnesota PHOS  
*Elective Total Hip Replacement*

Preoperative Hip

dphip 103. Preoperative hip X-ray ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #104.  
If answer is "YES", was it normal?

dhipn Normal ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "YES" or "UNKNOWN", skip to #104.  
If answer is "NO", complete this section.

dphoste a. Severe Osteoporosis ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #103b.  
If answer is "YES", continue with this section.

dphsoex Indicate extremity: ☐ 1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown

dphsart b. Severe Arthritis ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #103c.  
If answer is "YES", continue with this section.

dphsaex Indicate extremity: ☐ 1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown

dphfnn c. Femoral Neck Nonunion ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #103d.  
If answer is "YES", continue with this section.

dphfnex Indicate extremity: ☐ 1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown





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*Elective Total Hip Replacement*

dphacn

d. Acetabulum Normal

☐

0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #103e.  
If answer is "YES", continue with this section.

dphacex

Indicate extremity:

☐

1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown

dphaca

e Acetabulum Abnormal

☐

0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #103f.  
If answer is "YES", continue with this section.

dphacae

Indicate extremity:

☐

1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown

dphnc

f. Avascular Necrosis

☐

0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #103g.  
If answer is "YES", continue with this section.

dphncex

Indicate extremity:

☐

1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown

dphbon

g. Bony Loss

☐

0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #103h.  
If answer is "YES", continue with this section.

dphbone

Indicate extremity:

☐

1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown



### *Elective Total Hip Replacement*

0 = No  
1 = Yes  
9 = Unknown

If answer is “**YES**”, continue with this section.

1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown

0 = No  
1 = Yes  
9 = Unknown

If answer is “YES”, continue with this section.

1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown

0 = No  
1 = Yes  
9 = Unknown

If answer is “**YES**”, continue with this section

Specify:

## Postoperative Hip

0 = No  
1 = Yes  
9 = Unknown

If answer is “YES”, was it normal?

0 = No  
1 = Yes  
9 = Unknown

If answer is “**NO**”, continue with this section.



Minnesota PHOS  
*Elective Total Hip Replacement*

**doffem**

a.

## Fracture of Femur

4

0 = No  
1 = Yes  
9 = Unknown

If answer is “**NO**” or “**UNKNOWN**”, skip to Question #104b.  
If answer is “**YES**”, continue with this section.

**doffeme**

Indicate extremity:

9

1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown

**dofac**

b.

## Fracture of Acetabulum

5

0 = No  
1 = Yes  
9 = Unknown

If answer is “NO” or “UNKNOWN”, skip to Question #104c.  
If answer is “YES”, continue with this section.

**dofacex**

Indicate extremity:

9

1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown

dopcm

C.

### Prosthesis Component Malposition

9

0 = No  
1 = Yes  
9 = Unknown

If answer is “**NO**” or “**UNKNOWN**”, skip to Question #104d.  
If answer is “**YES**”, continue with this section.

dopcmex

Indicate extremity:

5

1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown

dostm

d.

Perforation of Stem by Femur ☐☐

0 = No  
1 = Yes  
9 = Unknown

If answer is “**NO**” or “**UNKNOWN**”, skip to Question #104e.  
If answer is “**YES**”, continue with this section.

**dostmex**

Indicate extremity:

5

1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown

doeqf

e.

### Equipment Failure or Malfunction

7

0 = No  
1 = Yes  
9 = Unknown





Minnesota PHOS  
Elective Total Hip Replacement

If answer is "NO" or "UNKNOWN", skip to Question #105.  
If answer is "YES", continue with this section.

doeqfex

Indicate extremity: ☐

1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown

Postoperative CAT Scan - Chest, Body

doct 105. Postoperative CAT Scan - Chest,  
Body

☐

0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #106.  
If answer is "YES", was it normal?

doctn

Normal

☐

0 = No  
1 = Yes  
9 = Unknown

If answer is "YES" or "UNKNOWN", skip to #106.  
If answer is "NO", continue with this section.

docti

a. Chest: Infiltrate

☐

0 = No  
1 = Yes  
9 = Unknown

doctpf

b. Chest: Pleural Effusion

☐

0 = No  
1 = Yes  
9 = Unknown

doctpm

c. Chest: Pulmonary Embolism ☐

0 = No  
1 = Yes  
9 = Unknown

Arteriogram/Angiogram/Venogram

dgaav 106. Arteriogram/Angiogram/  
Venogram performed

☐

0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #107.  
If answer is "YES", continue with this section.

dgaavd

a. Date

--  
MM DD YY



Minnesota PHOS  
Elective Total Hip Replacement

dgaavn      b.      Normal      ☐      0 = No  
1 = Yes  
9 = Unknown

If answer is "YES" or "UNKNOWN", skip to #107.  
If answer is "NO", continue with this section.

dgdvt      c.      Deep Venous Thrombosis      ☐      0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #107.  
If answer is "YES", continue with this section.

dgdvtex      Indicate extremity:      ☐      1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown

OPERATIVE EPISODES

epn      107.      Operative Episode:      # ☐

epd      a.      Date:      --  
MM   DD   YY

epstart      b.      Start time:      --  
MM   DD   YY

epstop      c.      Stop time:      --  
MM   DD   YY

epar      d.      Anesthetic Risk:            1 = Class 1   1E = Class 1 Emerg  
2 = Class 2   2E = Class 2 Emerg  
3 = Class 3   3E = Class 3 Emerg  
4 = Class 4   4E = Class 4 Emerg  
5 = Class 5   5E = Class 5 Emerg  
9 = Unknown

e.      ICD-9-CM Procedure Codes:

→      ep1      ep2      ep3      ep4      ep5  
1.       2.       3.       4.       5.

epextop      f.      Extremity operated on:      ☐      1 = Right  
2 = Left  
3 = Both  
9 = Unknown







Minnesota PHOS  
Elective Total Hip Replacement

eppath (11) Pathology Report ☐ 0 = No  
1 = Yes  
9 = Unknown

i. Operative Information:

epshbp (1) High Blood Pressure: ☐☐☐ mm Systolic

epdhbp ☐☐☐ mm Diastolic

epsibp (2) Low Blood Pressure: ☐☐☐ mm Systolic

dpdlbp ☐☐☐ mm Diastolic

epblos j. Estimated Blood Loss: ☐☐☐☐ cc's

k. Surgical Approach

epsaa (1) Anterior ☐ 0 = No  
1 = Yes  
9 = Unknown

epsapl (2) Posterior/  
Posteriolateral ☐ 0 = No  
1 = Yes  
9 = Unknown

epsaal (3) Anterolateral ☐ 0 = No  
1 = Yes  
9 = Unknown

epsalt (4) Lateral  
Transtrochanteric  
Osteotomy ☐ 0 = No  
1 = Yes  
9 = Unknown

epsaoth (5) Other ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #107L.  
If answer is "YES", continue with this section.

epsaots Specify: \_\_\_\_\_





\*\*\*NOTE\*\*\*THERE ARE 15 FIELDS FOR:\*\*\*

1(1) PROSTHESIS TYPE: (EPRT1 TO EPRT15)

1(2)(a) PROSTHESIS NAME AND TYPE OF CEMENT (EPRNT1 TO EPRNT15)

1(2)(b) PROSTHESIS SERIAL NUMBER (ID#) (EPRSN1 TO EPRSN15)

1. Prosthesis Type and Type of Cement:

(1) Indicate the  
prosthesis type:

☐

- 1 = Primary cemented  
2 = Cemented femoral component  
and biologic ingrowth acetabulum  
3 = Cemented femoral component  
and bipolar head articulation  
4 = Press fit cementless femoral component  
and bipolar head  
5 = Cementless  
9 = Unknown

(2). Indicate prosthesis name and type of cement

(a) Indicate prosthesis name and type of cement: \_\_\_\_\_

(b) Serial Number (ID#): \_\_\_\_\_

OPERATIVE ADVERSE OCCURRENCES

yoc 108. Operative Adverse Occurrences

☐

- 0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #109.

If answer is "YES", continue with this section.

yami

a. AMI

☐

- 0 = No  
1 = Yes  
9 = Unknown

yra

b. Respiratory Arrest

☐

- 0 = No  
1 = Yes  
9 = Unknown

ysusar

c. Sustained Arrhythmia

☐

- 0 = No  
1 = Yes  
9 = Unknown

ycastr

d. Cardiac Arrest

☐

- 0 = No  
1 = Yes  
9 = Unknown

yhth

e. Hyperthermia

☐

- 0 = No  
1 = Yes  
9 = Unknown

tseiz

f. Seizure

☐

- 0 = No  
1 = Yes  
9 = Unknown



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ystroke      g.      Stroke      ☐      0 = No  
1 = Yes  
9 = Unknown

yblshk      h.      Uncontrolled Bleeding or Shock      ☐      0 = No  
1 = Yes  
9 = Unknown

yff      i.      Fracture of the femur      ☐      0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #108j.  
If answer is "YES", continue with this section.

yffex      Indicate extremity:      ☐      1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown

yfac      j.      Fracture of the acetabulum      ☐      0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #108k.  
If answer is "YES", continue with this section.

yfacex      Indicate extremity:      ☐      1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown

ypcm      k.      Prosthesis component malposition      ☐      0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #108l.  
If answer is "YES", continue with this section.

ypcmex      Indicate extremity:      ☐      1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown

ystm      l.      Perforation of stem by femur      ☐      0 = No  
1 = Yes  
9 = Unknown

yeqf      m.      Equipment failure or malfunction      ☐      0 = No  
1 = Yes  
9 = Unknown



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ymvd	n.	Major vessel damage		0 = No 1 = Yes 9 = Unknown
0	1	0	0	0
1	1	0	0	0
2	1	0	0	0
3	1	0	0	0
4	1	0	0	0
5	1	0	0	0
6	1	0	0	0
7	1	0	0	0
8	1	0	0	0
9	1	0	0	0
10	1	0	0	0
11	1	0	0	0
12	1	0	0	0
13	1	0	0	0
14	1	0	0	0
15	1	0	0	0
16	1	0	0	0
17	1	0	0	0
18	1	0	0	0
19	1	0	0	0
20	1	0	0	0
21	1	0	0	0
22	1	0	0	0
23	1	0	0	0
24	1	0	0	0
25	1	0	0	0
26	1	0	0	0
27	1	0	0	0
28	1	0	0	0
29	1	0	0	0
30	1	0	0	0
31	1	0	0	0
32	1	0	0	0
33	1	0	0	0
34	1	0	0	0
35	1	0	0	0
36	1	0	0	0
37	1	0	0	0
38	1	0	0	0
39	1	0	0	0
40	1	0	0	0
41	1	0	0	0
42	1	0	0	0
43	1	0	0	0
44	1	0	0	0
45	1	0	0	0
46	1	0	0	0
47	1	0	0	0
48	1	0	0	0
49	1	0	0	0
50	1	0	0	0
51	1	0	0	0
52	1	0	0	0
53	1	0	0	0
54	1	0	0	0
55	1	0	0	0
56	1	0	0	0
57	1	0	0	0
58	1	0	0	0
59	1	0	0	0
60	1	0	0	0
61	1	0	0	0
62	1	0	0	0
63	1	0	0	0
64	1	0	0	0
65	1	0	0	0
66	1	0	0	0
67	1	0	0	0
68	1	0	0	0
69	1	0	0	0
70	1	0	0	0
71	1	0	0	0
72	1	0	0	0
73	1	0	0	0
74	1	0	0	0
75	1	0	0	0
76	1	0	0	0
77	1	0	0	0
78	1	0	0	0
79	1	0	0	0
80	1	0	0	0
81	1	0	0	0
82	1	0	0	0
83	1	0	0	0
84	1	0	0	0
85	1	0	0	0
86	1	0	0	0
87	1	0	0	0
88	1	0	0	0
89	1	0	0	0
90	1	0	0	0
91	1	0	0	0
92	1	0	0	0
93	1	0	0	0

<b>youth</b>	<b>o.</b>	<b>Other</b>	□	0 = No 1 = Yes 9 = Unknown
--------------	-----------	--------------	---	----------------------------------

If answer is “**NO**” or “**UNKNOWN**”, skip to Question #109.  
If answer is “**YES**”, continue with this section.

yoths Specify: \_\_\_\_\_

## TREATMENT INTERVENTIONS

tsd	109.	Surgical Drains	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
-----	------	-----------------	--------------------------	----------------------------------

If answer is “NO” or “UNKNOWN”, skip to Question #110.  
If answer is “YES”, continue with this section.

Indicate the drain type:

tsdopen	a.	Open:	<input type="text"/>	0 = No
				1 = Yes
				9 = Unknown

<b>tsdclos</b>	b.	Closed:	<input type="checkbox"/>	0 = No
				1 = Yes
				2 = Unknown

<b>tfoley</b>	110.	Foley Catheter:	<input type="checkbox"/>	0 = No
				1 = Yes
				9 = Unknown

### Embolic Prophylaxis

<b>tpemb</b>	111. Preoperative Embolic Prophylaxis	<input type="checkbox"/>	0 = No
			1 = Yes
			9 = Unknown

If answer is “NO” or “UNKNOWN”, skip to Question #112.  
If answer is “YES”, continue with this section.

tpemhep	a.	Heparin	<input type="checkbox"/>	0 = No
				1 = Yes
				9 = Unknown

tpemcom	b.	Coumadin	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
---------	----	----------	--------------------------	----------------------------------



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tpemasa      c.      ASA      ☐      0 = No  
1 = Yes  
9 = Unknown

tpemted      d.      TEDS      ☐      0 = No  
1 = Yes  
9 = Unknown

tpemoth      e.      Other      ☐      0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #112.

If answer is "YES", continue with this section.

tpemots      Specify: \_\_\_\_\_

tspiro      112.      Incentive Spirometer      ☐      0 = No  
1 = Yes  
9 = Unknown

toem      113.      Postoperative Embolic Prophylaxis      ☐      0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #114.

If answer is "YES", continue with this section.

toemhep      a.      Heparin      ☐      0 = No  
1 = Yes  
9 = Unknown

toemcom      b.      Coumadin      ☐      0 = No  
1 = Yes  
9 = Unknown

toemasa      c.      ASA      ☐      0 = No  
1 = Yes  
9 = Unknown

toemcpm      d.      CPM      ☐      0 = No  
1 = Yes  
9 = Unknown





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toemted e. TEDS ☐ 0 = No  
 1 = Yes  
 9 = Unknown

toemoth f. Other ☐ 0 = No  
 1 = Yes  
 9 = Unknown

toemots Specify: \_\_\_\_\_

toblprd 114. Blood Products ☐ 0 = No  
 1 = Yes  
 2 = Refused  
 9 = Unknown

If answer is "NO", "UNKNOWN", or "REFUSED", skip to question #115.  
 If answer is "YES", complete this section.

toblaut a. Autologous ☐ 0 = No  
 1 = Yes  
 9 = Unknown

toblhom b. Homologous ☐ 0 = No  
 1 = Yes  
 9 = Unknown

toblrb c. RBCs ☐ 0 = No  
 1 = Yes  
 9 = Unknown

toblwbl d. Whole Blood ☐ 0 = No  
 1 = Yes  
 9 = Unknown

toblplt e. Platelets/Platelet Concentrate ☐ 0 = No  
 1 = Yes  
 9 = Unknown

toblffp f. Fresh Frozen Plasma ☐ 0 = No  
 1 = Yes  
 9 = Unknown

toblsav g. Cell Saver ☐ 0 = No  
 1 = Yes  
 9 = Unknown

tope 115. Patient Education (PT) ☐ 0 = No  
 1 = Yes  
 9 = Unknown



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toped 116. Date of first PT visit: --  
MM DD YY

topenum117. Number of PT visits:

topambd118. Date patient first started to ambulate: --  
MM DD YY

PRESCRIBED MEDS

mantd 119. Initial Antibiotic Dose --  
MM DD YY

mpant 120. Preoperative Antibiotics  0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #121.  
If answer is "YES", continue with this section.

mpant1 a. Antibiotic # 1  (0 = None)

mpt1 b. Time of Admin. # 1  1 = ≤24 hrs  
2 = >24 - ≤36 hrs  
3 = >36 - ≤48 hrs  
4 = >48 - ≤72 hrs  
5 = >72 hours  
9 = unknown

mpant2 c. Antibiotic # 2  (0 = None)

If answer is "0", skip to #120e.

mpt2 d. Time of Admin. # 2  1 = ≤24 hrs  
2 = >24 - ≤36 hrs  
3 = >36 - ≤48 hrs  
4 = >48 - ≤72 hrs  
5 = >72 hours  
9 = unknown

mpant3 e. Antibiotic # 3  (0 = None)

If answer is "0", skip to #121.

mpt3 f. Time of Admin. # 3  1 = ≤24 hrs  
2 = >24 - ≤36 hrs  
3 = >36 - ≤48 hrs  
4 = >48 - ≤72 hrs  
5 = >72 hours  
9 = unknown



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miant 121. Intraoperative Antibiotics ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #122.  
If answer is "YES", continue with this section.

miant1 a. Antibiotics #1 ☐☐☐ (0 = None)

miant2 b. Antibiotics #2 ☐☐☐ (0 = None)

miant3 c. Antibiotics #3 ☐☐☐ (0 = None)

moant 122. Postoperative Antibiotics ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #123.  
If answer is "YES", continue with this section.

moant1 a. Antibiotic # 1 ☐☐☐ (0 = None)

mot1 b. Time of Admin. #1 ☐ 1 = ≤24 hrs  
2 = >24 - ≤36 hrs  
3 = >36 - ≤48 hrs  
4 = >48 - ≤72 hrs  
5 = >72 hours  
9 = unknown

moant2 c. Antibiotic # 2 ☐☐☐ (0 = None)

If answer is "0", skip to #122e.

mot2 d. Time of Admin. #2 ☐ 1 = ≤24 hrs  
2 = >24 - ≤36 hrs  
3 = >36 - ≤48 hrs  
4 = >48 - ≤72 hrs  
5 = >72 hours  
9 = unknown

moant3 e. Antibiotic # 3 ☐☐☐ (0 = None)

If answer is "0", skip to #123.



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mot3 f. Time of Admin. #3 ☐ 1 = ≤24 hrs  
2 = >24 - ≤36 hrs  
3 = >36 - ≤48 hrs  
4 = >48 - ≤72 hrs  
5 = >72 hours  
9 = unknown

moadv 123. Adverse Reaction to Medication ☐ 0 = No  
1 = Yes  
9 = Unknown

POSTOPERATIVE COMPLICATIONS

General Postoperative Complications

zoany 124. Postoperative Complications ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #125.  
If answer is "YES", continue with this section.

zoarest a. Cardiac Arrest ☐ 0 = No  
1 = Yes  
9 = Unknown

zoshock b. Shock ☐ 0 = No  
1 = Yes  
9 = Unknown

zodvt c. Deep Vein Thrombosis ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #124d.  
If answer is "YES", continue with this section.

zodvtex Indicate extremity: ☐ 1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown

zoosbl d. Operative Site Bleeding ☐ 0 = No  
1 = Yes  
9 = Unknown

zoblocc e. GI Hemorrhage, Occult  
Blood Guaiac + Stool ☐ 0 = No  
1 = Yes  
9 = Unknown





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<b>zoblmod</b>	f.	GI Hemorrhage, Moderate Bleeding	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zoblmas</b>	g.	GI Hemorrhage, Massive bleeding	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zope</b>	h.	Pulmonary Edema	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zopemb</b>	i.	Pulmonary Embolism	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zowound</b>	j.	Wound Infection/Abscess	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zowfail</b>	k.	Wound Failure (partial or complete)	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zoat</b>	l.	Atelectasis	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zohema</b>	m.	Hematoma at Operative Site	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zomi</b>	n.	Myocardial Infarction	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zocva</b>	o.	CVA	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zopn</b>	p.	Pneumonia	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zoresf</b>	q.	Respiratory Failure	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown



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zorrer	r.	Urinary Retention	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
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zoarrhy	s.	Arrhythmias	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
---------	----	-------------	--------------------------	----------------------------------

If answer is “**NO**” or “**UNKNOWN**”, skip to Question #124t.  
If answer is “**YES**”, continue with this section.

<b>zosvt</b>	(1)	Sustained Ventricular Tachycardia	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
--------------	-----	-----------------------------------	--------------------------	----------------------------------

<b>zohb2</b>	(2)	Heart Block, 2nd Degree	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
--------------	-----	-------------------------	--------------------------	----------------------------------

<b>zohb3</b>	(3)	Heart Block, 3rd degree	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
--------------	-----	-------------------------	--------------------------	----------------------------------

<b>zosa</b>	(4)	Supraventricular Arrhythmia	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
-------------	-----	--------------------------------	--------------------------	----------------------------------

**zova** (5) Ventricular Arrhythmia ☐ 0 = No  
1 = Yes  
9 = Unknown

<b>zosnd</b>	(6)	Sinus Node Dysfunction	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
--------------	-----	------------------------	--------------------------	----------------------------------

<b>zonbt</b>	(7)	Nonmalignant Bradycardia or Tachyarrhythmia	0 = No
			1 = Yes
			9 = Unknown

zocoma	t.	Coma	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
--------	----	------	--------------------------	----------------------------------

zoulcer	u.	Gastric “Stress” Ulcer	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
---------	----	------------------------	--------------------------	----------------------------------



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<b>zoneuro</b>	v.	Neuropathy	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zobact</b>	w.	Bacteremia	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zochf</b>	x.	CHF	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zouti</b>	y.	UTI	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zointub</b>	z.	Intubation $\geq$ to 24 hours	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zodeath</b>	aa.	Death	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zorenf</b>	bb.	Renal Failure	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zoatn</b>	cc.	ATN not Requiring Dialysis (Creatinine > 1.0 over baseline)	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zoinfc</b>	dd.	Infection > 72 Hours after Admission	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zotemp</b>	ee.	Temperature > 38.5° C or 101.3° F	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zoantig</b>	ff.	Antibiotics Given	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown
<b>zooth</b>	gg.	Other	<input type="checkbox"/>	0 = No 1 = Yes 9 = Unknown



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If answer is "NO" or "UNKNOWN", skip to Question #125.  
If answer is "YES", continue with this section.

zooths Please Specify: \_\_\_\_\_

Postoperative Orthopedic Complications

ooc 125. Postoperative orthopedic complications ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #126.  
If answer is "YES", continue with this section.

ooff a. Fracture of the femur ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #125b.  
If answer is "YES", continue with this section.

ooffex Indicate extremity: ☐ 1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown

oofac b. Fracture of the acetabulum ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #125c.  
If answer is "YES", continue with this section.

oofacex Indicate extremity: ☐ 1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown

oopcm c. Prosthesis component malposition ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #125d.  
If answer is "YES", continue with this section.





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oopcmex

Indicate extremity: ☐

1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown

oostm

d. Perforation of stem by ☐  
femur

0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #125e.  
If answer is "YES", continue with this section.

oostmex

Indicate extremity: ☐

1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown

ooeqf

e. Equipment failure or ☐  
malfunction

0 = No  
1 = Yes  
9 = Unknown

oomvd

f. Major vessel damage ☐

0 = No  
1 = Yes  
9 = Unknown

oosnd

g. Sciatic nerve damage ☐  
or palsy

0 = No  
1 = Yes  
9 = Unknown

oofnd

h. Femoral nerve damage ☐  
or palsy

0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #125i.  
If answer is "YES", continue with this section.

oofndex

Indicate extremity: ☐

1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown

ooli

i. Limb ischemia ☐

0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #125j.  
If answer is "YES", continue with this section.



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ooliex

Indicate extremity: ☐

1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown

oodc

j. Dislocation of  
components

☐

0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #125k.  
If answer is "YES", continue with this section.

oodcex

Indicate extremity: ☐

1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown

ooumc

k. Unrecognized  
malposition of component

☐

0 = No  
1 = Yes  
9 = Unknown

oocf

l. Component failure

☐

0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #125m.  
If answer is "YES", continue with this section.

oocfex

Indicate extremity: ☐

1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown

oofix

m. Fixation failure

☐

0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #125n.  
If answer is "YES", continue with this section.

oofixex

Indicate extremity: ☐

1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown

oosteom

n. Osteomyelitis

☐

0 = No  
1 = Yes  
9 = Unknown



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oobur

o. Trochanteric bursitis ☐

0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #125p.  
If answer is "YES", continue with this section.

ooburex

Indicate extremity: ☐

1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown

otrnr

p. Trochanteric  
nonunion ☐

0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #125q.  
If answer is "YES", continue with this section.

ootrnex

Indicate extremity: ☐

1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown

oosub

q. Subluxation ☐

0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #125r.  
If answer is "YES", continue with this section.

oosubex

Indicate extremity: ☐

1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown

ooth

r. Other ☐

0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #126.  
If answer is "YES", continue with this section.

ooths

Specify: \_\_\_\_\_



TRAUMA SUFFERED IN HOSPITAL

qh 126. Trauma suffered in Hospital ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to #127.  
If answer is "YES", complete this section.

qulcer a. Decubitus Ulcer ☐ 0 = No  
1 = Yes  
9 = Unknown

qinjury b. Accidental Injury ☐ 0 = No  
1 = Yes  
9 = Unknown

qfall c. Patient Fall ☐ 0 = No  
1 = Yes  
9 = Unknown

qoth d. Other ☐ 0 = No  
1 = Yes  
9 = Unknown

If answer is "NO" or "UNKNOWN", skip to Question #127.  
If answer is "YES", continue with this section.

qoths Specify: \_\_\_\_\_

DISCHARGE STATUS/PLAN

127. Discharge ADL/Continence

dcblad a. Bladder Continence: ☐ 1 = Continent  
2 = Incontinent  
3 = Dialysis No urine output  
9 = Inadequate Documentation

dcbowel b. Bowel Continence: ☐ 1 = Continent  
2 = Incontinent  
3 = Bowel Ostomy  
9 = Inadequate Documentation

dcmobil 128. Mobility: ☐ 1 = Independent ambulation 5 = Bedridden  
2 = Cane 6 = Crutches  
3 = Walker 7 = Crutches and Walker  
4 = Wheelchair 8 = Other  
9 = Unknown





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dcdisp 129. Disposition



- 1 = D/C to home
- 2 = Transfer to another hosp
- 3 = Transfer to swing, SNF, or ICF
- 4 = Transfer to Rehab Facility
- 5 = Transfer to another institution
- 6 = Transfer to HHA
- 7 = AMA
- 8 = Expired
- 9 = Unknown

130. Final Listing of Procedures:

pr1	1.	□□.□□	_____
pr2	2.	□□.□□	_____
pr3	3.	□□.□□	_____
pr4	4.	□□.□□	_____
pr5	5.	□□.□□	_____
pr6	6.	□□.□□	_____
pr7	7.	□□.□□	_____
pr8	8.	□□.□□	_____
pr9	9.	□□.□□	_____
pr10	10.	□□.□□	_____
pr11	11.	□□.□□	_____
pr12	12.	□□.□□	_____
pr13	13.	□□.□□	_____
pr14	14.	□□.□□	_____
pr15	15.	□□.□□	_____

131. Final Listing of Diagnoses:

dx1	1.	□□□.□□	_____
dx2	2.	□□□.□□	_____
dx3	3.	□□□.□□	_____
dx4	4.	□□□.□□	_____
dx5	5.	□□□.□□	_____



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dx6	6.	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> .	<input type="text"/> <input type="text"/>	<hr/>
dx7	7.	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> .	<input type="text"/> <input type="text"/>	<hr/>
dx8	8.	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> .	<input type="text"/> <input type="text"/>	<hr/>
dx9	9.	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> .	<input type="text"/> <input type="text"/>	<hr/>
dx10	10.	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> .	<input type="text"/> <input type="text"/>	<hr/>
dx11	11.	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> .	<input type="text"/> <input type="text"/>	<hr/>
dx12	12.	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> .	<input type="text"/> <input type="text"/>	<hr/>
dx13	13.	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> .	<input type="text"/> <input type="text"/>	<hr/>
dx14	14.	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> .	<input type="text"/> <input type="text"/>	<hr/>
dx15	15.	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> .	<input type="text"/> <input type="text"/>	<hr/>



**COLORADO TRACKING VARIABLES**  
**for HIP REPLACEMENT**  
**(not listed on worksheet)**

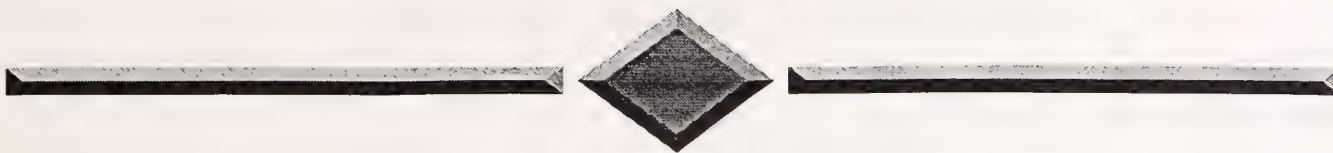
HICO	=	'MRH VERIFICATION PRIN PROC MET'
FNO	=	'MRH VERIFICATION FIRST NAME'
LNO	=	'MRH VERIFICATION LAST NAME'
HOSPNO	=	'MRH VERIFICATION HOSPNO'
HOSPADO	=	'MRH VERIFICATION HOSPADO'
PROVO	=	'MRH VERIFICATION PROVIDERO'
admitdom	=	'MRH VERIFICATION ADMIT DATEO MONTH'
admitdod	=	'MRH VERIFICATION ADMIT DATEO DAY'
admitdoy	=	'MRH VERIFICATION ADMIT DATEO YEAR'
dcdom	=	'MRH VERIFICATION DISCHARGE DATEO MONTH'
dcdod	=	'MRH VERIFICATION DISCHARGE DATEO DAY'
dcdoy	=	'MRH VERIFICATION DISCHARGE DATEO YEAR'
MRO	=	'MRH VERIFICATION MEDICAL RECORD NO'
EDITSFLAG	=	'MRH EDITS FLAG'
selectdm	=	'MRH SELECT DATE MONTH'
selectdd	=	'MRH SELECT DATE DAY'
selectdy	=	'MRH SELECT DATE YEAR'
LASTMODIFI	=	'MRH LAST MODIFIED'



**Elective Total Hip Replacement**  
**Instructions**



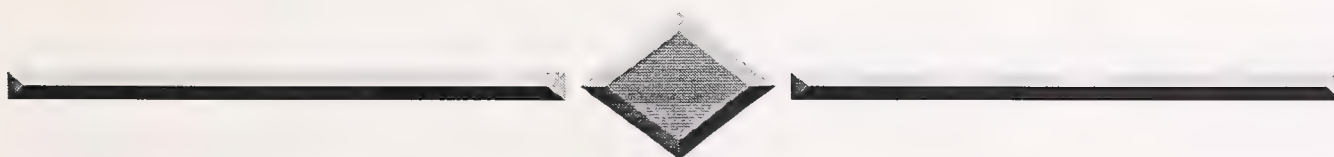




**MINNESOTA PHOS**

**ELECTIVE TOTAL HIP REPLACEMENT**

**INSTRUCTIONS**





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# MINNESOTA PHOS

## ELECTIVE TOTAL HIP REPLACEMENT

### Instructions

**General Comments:** To minimize movements within the medical record, variables are grouped according to the sections of the medical record (e.g., past medical history, admission orders, etc.) where the data are likely to be found.

Please be sure to answer every question as appropriate.

We trust your judgment as a professional abstractor, but also want data collection to be as consistent as possible. Please contact the Central Office if you have questions during abstraction; this will help us recognize patterns or problems with the abstraction form itself. If you have a question and cannot reach us immediately, complete the rest of the abstraction for that record and set it aside until your question can be answered.

### General Instructions:

- a. Unless otherwise specified, the following order of priority is to be followed when conflicting information is documented in the medical record:
  - 1st priority - physician documentation
  - 2nd priority - laboratory reports if available and appropriate
  - 3rd priority - nurses' documentation
- b. Use the following codes to answer questions unless otherwise specified:

0 = "NO"  
1 = "YES"  
9 = "UNKNOWN"

**"NO"** - For abstraction purposes, enter **"NO"** when there is no documentation of the presence of a disease, condition, sign, symptom, etc.

**"YES"** - Enter **"YES"** when a disease, condition, sign, symptom, etc., is documented as being present.

**"UNKNOWN"** - Many variables have an **"UNKNOWN"** option. This option should be abstracted when the medical record contains illegible or insufficient documentation and as a result, the RNRC is unable to make a determination. If you are unable to determine a date, enter 11/11/11.

- c. **History Definition** - For abstraction purposes, any sign, symptom, condition, surgery, etc., which occurred prior to hospital arrival.





### *Elective Total Hip Replacement*

- d. **Current/Admission Definition** - For abstraction purposes, any sign, symptom, condition, finding, etc., evident on arrival to the hospital or within the first 24 hours of admission.
- e. **NOTE:** All adjectives used as qualifiers and modifiers are to be considered as positive findings unless instructed otherwise in the data collection instrument. All abbreviations are acceptable for abstraction.
- f. If information for any numeric data item is given as a range, abstractor should enter the higher end of the range.

### **PATIENT DEMOGRAPHICS**

- 1. ***PHOS ID Number***
- 2. ***HIC Number:*** Enter the patient's medicare number. If the patient's HIC number does not correspond to the HIC number assigned by Minnesota, notify the Central Office.
- 3. ***Medical Record Number:*** Enter the number of the medical record for this stay. If you are unable to determine the medical record number, enter 9.
- 4. ***Patient Name:*** Enter the name of the patient as follows: First, Last.
- 5. ***Hospital Provider Number***
- 6. ***Hospital Name***
- 7. ***Hospital Address***
- 8. ***Date of admission:*** Please use the MM/DD/YY format. Priority source, the admission facesheet.
- 9. ***Date of discharge:*** Please use the MM/DD/YY format. First priority source is the admission facesheet followed by nursing discharge notes.
- 10. ***Date of Birth:*** Record the patient's date of birth using the MM/DD/YYYY format, including the century (e.g., 1892, 1931, etc.).
- 11. ***Principal Procedure:*** Enter the principal procedure code. If a code is not listed, enter 0.
- 12. ***State:*** Enter the state the patient resides in. Record the two digit abbreviation for the state.

Alabama  
Alaska

AL  
AK

Montana  
Nebraska

MT  
NE



### *Elective Total Hip Replacement*

Arizona	AZ	Nevada	NV
Arkansas	AR	New Hampshire	NH
California	CA	New Jersey	NJ
Colorado	CO	New Mexico	NM
Connecticut	CT	New York	NY
Delaware	DE	North Carolina	NC
Dist. of Columbia	DC	North Dakota	ND
Florida	FL	Ohio	OH
Georgia	GA	Oklahoma	OK
Hawaii	HI	Oregon	OR
Idaho	ID	Pennsylvania	PA
Illinois	IL	Rhode Island	RI
Indiana	IN	South Carolina	SC
Iowa	IA	South Dakota	SD
Kansas	KS	Tennessee	TN
Kentucky	KY	Texas	TX
Louisiana	LA	Utah	UT
Maine	ME	Vermont	VT
Maryland	MD	Virginia	VA
Massachusetts	MA	Washington	WA
Michigan	MI	West Virginia	WV
Minnesota	MN	Wisconsin	WI
Mississippi	MS	Wyoming	WY
Missouri	MO		

13. **Gender:** Indicate the patient's gender.

1 = Male  
2 = Female  
9 = Unknown (Gender is illegible or cannot be readily determined from the medical record.)

14. **Insurance Type:** Enter the patient's type of insurance. Do not make any assumptions about the type of coverage available. The information must be specifically listed on the admission/facesheet.

1 = Medicaid  
2 = Medigap (includes BC/BS, AARP, and CHAMPUS)  
3 = Other (includes but not limited to auto insurance coverage, liability coverage from homeowners, workman's compensation.)  
4 = No other insurance  
9 = Inadequate documentation (cannot be readily determined).

15. **Race:** Enter the appropriate code to indicate the patient's race. Acceptable locations for this information in the order of priority are physician documentation, nursing admission documentation, nursing notes, admission/facesheet, and EKG report.

1 = White - White (Whi or W) or Caucasian (Cauc, Cau, or Ca).  
2 = Hispanic - Hispanic (Hisp, His, or H), Latin American, Latino, Chicano, Cuban, Mexican, Mexican-American, Puerto Rican, South American, Central American, Spanish or Spanish American.



*Elective Total Hip Replacement*

- 3 = Black - Black (B), Negro, Afro-American, Black African or Black American.
- 4 = Asian - Asian, Chinese, Asian-American, Filipino, Japanese, Korean, Vietnamese or Oriental.
- 5 = Native American - Native American, American Indian, Alaskan Native or any recognized tribal entity (e.g., Apache, Sioux, Seminole, etc.).
- 8 = Other - Race is adequately and clearly documented but does not fit into any of the other categories (e.g., Iranian).
- 9 = Unknown - Race cannot be readily determined, is not legible or is not addressed.

16. **Re-abstract:** Do not change this option.

17. **Ab Id:** Do not change this option.

**Record Verification:**

Verify that the medical record selection is appropriate for this study.

Verify the principal diagnosis and procedure. If correct, select "YES". If not, select "NO".

**Exclude** if the following ICD-9-CM codes are identified.

- 835.0 - 835.13 Hip dislocations
- 820.0 - 820.9 Hip fractures
- 714.0 Rheumatoid arthritis
- 716.10-716.19 Traumatic arthritis
- 754.30 Congenital hip dysplasia
- 755.30 Congenital hip dysplasia
- 732.1 Legg-Calve-Perthes disease
- 731.0 Paget's disease

Procedure Code

- 81.53 Revision of total hip

Verify whether this case should be excluded. Select "YES" if no exclusion exists. Select "NO" if exclusion exists. Identify the type of exclusion as indicated. **For the ELECTIVE TOTAL HIP REPLACEMENT study, the correct principle procedure code is 81.51.** Exclude from review if this is a secondary procedure code or if the procedure is bilateral.





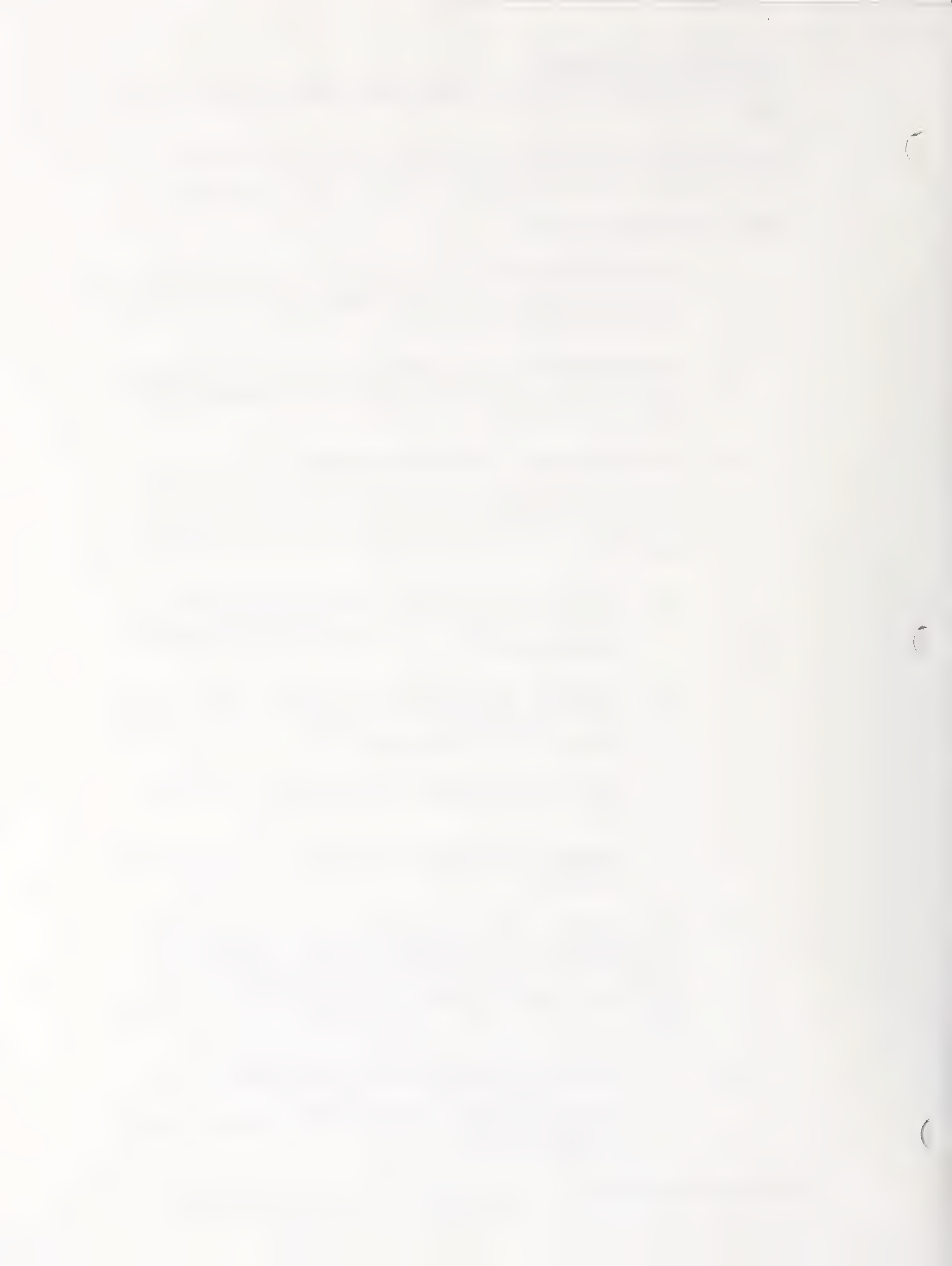
### *Elective Total Hip Replacement*

If an exclusion is identified, contact the Central Office for approval to continue with the review.

If approval to proceed is obtained or if there is no exclusion, indicate "YES". If no approval is obtained, indicate "NO" and stop abstraction. Proceed to the next case.

### **USUAL LEVEL OF FUNCTION:**

18. **Admission Height:** Select 1 to indicate inches, 2 to indicate centimeters, or 9 to indicate unknown. If 9 is selected, leave the value field blank. Use the nursing assessment as the first priority.
19. **Admission Weight:** Select 1 to indicate pounds, 2 to indicate kilograms or 9 to indicate unknown. If 9 is selected, leave the value field blank. Use the nursing assessment as the first priority.
20. **Bladder Continence:** Select the appropriate code to record the patient's normal level of bladder continence prior to admission. If the patient's continence status changed as a result of the acute illness which prompted this admission, record the continence status immediately prior to the acute illness.
  - 1 = Continent: No documentation of urinary incontinence. Bladder continence is considered to be present if documentation indicates "stress incontinence".
  - 2 = Incontinent: Patient is incontinent of urine or has a foley catheter, ileo conduit, nephrostomy tube or cystotomy. This option includes patients who perform self-catheterization.
  - 3 = Dialysis/No urine output: Chronic dialysis patient with no urine output.
  - 9 = Inadequate Documentation: Patient's bladder continence cannot be determined.
21. **Bowel Continence:** Select the appropriate code to record the patient's normal level of bowel continence prior to admission. If the patient's continence status changed as a result of the acute illness which prompted this admission, record the continence status immediately prior to the acute illness.
  - 1 = Continent: No documentation of bowel incontinence.
  - 2 = Incontinent: Patient is incontinent of stool; this does not include a colostomy or ileostomy.





- 3 = Bowel Ostomy: Includes patients with a colostomy or ileostomy. For patients with a colostomy, this option is selected regardless of the patient's ability to control the drainage.
- 9 = Inadequate Documentation: Patient's bowel continence cannot be determined.

22. **Mobility**: Select the appropriate code to indicate the patient's normal level of mobility before this hospitalization. If the patient's mobility status changed as a result of the acute illness which prompted this admission, record the mobility status immediately prior to the acute illness.

- 1 = Independent Ambulation  
2 = Cane  
3 = Walker  
4 = Wheelchair  
5 = Bedridden  
8 = Other  
9 = Unknown

### **History of Substance Use**

23. **Smoking History**: Exclude cigars, pipes or chewing tobacco but assume cigarettes if no other form of tobacco is mentioned. The patient is considered to have a smoking history even if he has quit smoking at this time.
24. **Chronic alcohol abusers**: Patient has alcohol dependence/tolerance/abuse or is a moderate-heavy or binge drinker. Also includes patients whose daily consumption is greater than or equal to 1/2 bottle wine (4 glasses), 3 beers or shots hard liquor or 3 cocktails. Exclude patients clearly described as no longer drinking.

### **HISTORY AND PHYSICAL**

**NOTE:** All adjectives used as qualifiers and modifiers are to be considered as positive findings unless the specific data element instructions state otherwise. All abbreviations are acceptable for abstraction.

- Physician H&P
- Initial Admission Physician Progress Note
- Initial Admission Physician Consultation H&P/Note
- Physician Emergency Room Notes/Reports
- Discharge Summary



## *Elective Total Hip Replacement*

Listed above are the acceptable locations for obtaining the history and physical information. Multiple sources may be used.

## **Neurological**

### **Neurological History**

25. ***History of Headache:*** Includes migraines, **recurrent** headaches (HA). All qualifiers and modifiers are acceptable.

### **Neurological Disease**

26. ***Cognitive Deficit/Mental Retardation:*** Includes slow learner, Alzheimer's disease or dementia.
27. ***History of CVA:*** Includes cerebrovascular accident (CVA), cerebral infarct, brain infarct or a stroke. Does not include TIA or current CVA/TIA.
28. ***CVA known to be hemorrhagic:*** Includes hemorrhagic infarct, CVA known to be hemorrhagic, cerebral hemorrhage or bleeding, hemorrhagic cerebrovascular accident (CVA), intracranial bleeding or hemorrhage, intracerebral bleeding or hemorrhage, ruptured intracranial aneurysm, cerebral occlusion, cerebral thrombosis, hemorrhagic stroke, intracranial bleed, ruptured intracranial aneurysm, intracerebral hemorrhage or bleed. **Exclude reversible ischemic neurological deficit (RIND).**

### **Current Neurological Disease**

29. ***Syncope:*** Includes near-syncope, fainting spells, passing out, pre-syncope or blackouts.
30. ***Cerebrovascular/TIA:*** Includes cerebral vascular accident, CVA, stroke or transient ischemic accident (TIA).

## **Cardiovascular**

### **Cardiac Disease History**

31. ***History of Arrhythmia:***

If "YES", select all applicable descriptions:

- a. = **Sustained Ventricular Tachycardia:** Ventricular tachycardia lasting 10 seconds or more, or literal documentation of sustained ventricular tachycardia or sustained V-tach.



- b. = **Heart Block, 2nd degree:** Includes second degree AV block, Wenckebach block, Mobitz type I, Mobitz type II or second degree heart block.
  - c. = **Heart Block, 3rd degree:** Includes complete heart block or AV dissociation.
  - d. = **Supraventricular Arrhythmia:** Includes SVT, atrial fibrillation, atrial flutter, atrial tachycardia, atrial couplets or paroxysmal atrial tachycardia (PAT).
  - e. = **Ventricular Arrhythmia:** Includes frequent multifocal or multiform PVCs, ventricular couplets, bigeminy, ventricular triplets, trigeminy, ventricular tachycardia, runs of ventricular tachycardia, V-tach, salvos or ventricular fibrillation.
  - f. = **Sinus Node Dysfunction:** Includes SA block, SA arrest or sick sinus syndrome.
  - g. = **Non-malignant bradycardia/tachyarrhythmia:** Includes sinus bradycardia, bradycardia, non-malignant bradycardia, sinus tachycardia, tachycardia or tachyarrhythmia.
32. **Hypertension:** Includes hypertensive heart disease, HTN, renovascular hypertension (portal hypertension), systemic hypertension, elevated blood pressure (BP), a history of high blood pressure (HBP or an up arrow followed by BP) or any other type of hypertension **except** intraocular or pulmonary.
33. **Angina:** Includes ischemic heart disease, unstable angina, myocardial ischemia, etc.
34. **MI:** Includes one or more myocardial infarctions/injuries (MI or AMI), heart attacks or heart injuries. Reference to ischemia or indeterminate descriptions such as "cannot rule out," "suspicious for," or "possible" would not be considered evidence of a previous MI. Acceptable evidence of an old infarction would include "infarct, age undetermined," "probable MI," or "MI possibly acute." If there is a preadmission or day of admission EKG with a finding of old MI, and it is noted by a physician, record "YES".
35. **Valvular disease:** Includes, but not limited to, mitral or aortic valve disorders.





### *Elective Total Hip Replacement*

36. ***Congestive Heart Failure:*** Includes CHF, pump failure, volume or fluid overload, pulmonary vascular congestion or cardiac decompensation.

### **History of Cardiovascular Surgery**

37. ***Coronary artery angioplasty:*** History of one or more angioplasties, attempted angioplasties, percutaneous transluminal angioplasty (PTCA) or arthrectomies.
38. ***CABG:*** History of one or more coronary artery bypass grafts (CABGs) or heart/coronary bypass.
39. ***Intracardiac (valve, aneurysm):*** Includes valve replacement, repair of septal defect, VSD, ASD or repair of aneurysm.
40. ***Peripheral vascular surgery:*** History of femoral-popliteal bypass, femoral-femoral bypass, embolectomy or varicose vein stripping.

### **Current CV**

41. ***Chest pain (steady):*** Includes substernal chest pain, chest tightening, chest pressure, chest discomfort, angina, exercise induced chest pain, heaviness, aching, pressure, crushing, squeezing or burning, epigastric or pain radiating to the arms/jaw. Also includes pain attributed to a possible cardiac origin.

**The pain MUST HAVE BECOME EVIDENT within 24 hours before or after admission, but need not be present at admission.**

Do not select this option for chest wall pain or any chest pain not attributed to a cardiac origin (e.g., pleuritic, arthritic or gastrointestinal).

42. ***Current Arrhythmia:***

... If "YES", select all applicable descriptions:

- a. = **Sustained Ventricular Tachycardia:** Ventricular tachycardia lasting 10 seconds or more, or literal documentation of sustained ventricular tachycardia or sustained V-tach.
- b. = **Heart Block, 2nd degree:** Includes second degree AV block, Wenckebach block, Mobitz type I, Mobitz type II or second degree heart block.
- c. = **Heart Block, 3rd degree:** Includes complete heart block or AV dissociation.





- d. = **Supraventricular Arrhythmia:** Includes SVT, supra-ventricular tachycardia, atrial fibrillation, atrial flutter, atrial tachycardia, atrial couplets or paroxysmal atrial tachycardia.
  - e. = **Ventricular Arrhythmia:** Includes frequent multifocal or multiform PVCs, ventricular couplets, bigeminy, ventricular triplets, trigeminy, ventricular tachycardia, runs of ventricular tachycardia, V-tach, salvos or ventricular fibrillation.
  - f. = **Sinus Node Dysfunction:** Includes SA block, SA arrest or sick sinus syndrome.
  - g. = **Non-malignant bradycardia/tachyarrhythmia:** Includes sinus bradycardia, bradycardia, non-malignant bradycardia, sinus tachycardia, tachycardia or tachyarrhythmia.
- 43. **Shock:** Includes cardiogenic shock, septic shock, cardiovascular or intravascular collapse or any type of shock.
  - 44. **Cardiomegaly:** Includes enlarged heart, heave or active precordium.
  - 45. **Pulmonary Edema:** Includes pulmonary congestion, congestive heart failure (CHF), wet lungs, cardiac decompensation, fluid overload, interstitial edema or pulmonary vascular congestion.
  - 46. **Peripheral Edema:** Includes sacral edema, fluid in tissues, pedal edema or edema of lower extremities.
  - 47. **Pulse Deficit:** Includes absent (0), diminished or markedly impaired peripheral pulses (1+).

#### **Vascular Disease**

- 48. **Central Vascular Disease:** Includes coronary artery disease, CAD, ASHD, ASCVD or carotid stenosis.
- 49. **Peripheral Vascular Disease:** Includes PVD, venous peripheral vascular disease, thrombophlebitis, venous ulceration, arterial peripheral vascular disease, ischemia to extremities, arterial obliterans, intermittent claudication, arterial insufficiency, ischemic claudication or claudication.

#### **Pulmonary**

#### **Pulmonary History**



50. ***Pulmonary Disease:*** Includes emphysema, bronchitis, chronic bronchitis, bronchiectasis, chronic obstructive pulmonary disease (COPD), chronic pulmonary disease, asthma, fibrosis, granuloma, chronic inflammatory process, chronic obstructive lung disease, chronic obstructive airway disease or tuberculosis.
51. ***Pulmonary Surgery:*** Includes pneumonectomy, bronchoscopy, lung biopsy or lobectomy.

### **Current Pulmonary**

52. ***Cough - Hemoptysis:*** Cough with blood streaked sputum/phlegm or coughing of frank blood.
53. ***Cough - Productive:*** Cough that produces phlegm or sputum.
54. ***Cough - Non-productive:*** Dry or dry-hacking cough. Includes cough without description of productive or non-productive.
55. ***Labored breathing:*** Dyspnea, labored breathing, fighting for air, shortness of breath (SOB) and use of respiratory muscles/intercostal retractions.

### **History of Cancer**

56. ***Cancer, any type:***

If "YES", identify type and stage of cancer:

a. ***Type of Cancer***

b. ***Stage of Cancer:***

- 1 = Local: Cancer with only local involvement, self-contained tumor, encapsulated tumor, in situ tumor or Dukes A. This option is also to be selected when there is documentation of cancer NOS or cancer with no mention of metastasis or nodal involvement.
- 2 = Regional: Solid tumors with regional involvement, tumor with involvement of nodes only or Dukes B.
- 3 = Metastatic: Cancer (CA) tumor, malignancy, carcinoma, sarcoma, malignant tumor type undetermined, melanoma or any term ending in sarcoma or carcinoma. The preceding CA terms must be associated with a metastasis, spread, extension, invasion or infiltration to any organ, bone,



## *Elective Total Hip Replacement*

subcutaneous tissue, muscle, etc. Includes Dukes C or D with the primary site unknown.

9 = Unknown: The stage of cancer cannot be determined or if documentation is illegible.

## **ADMISSION MEDICATION HISTORY**

### **Medication History at Time of Admission**

57. **ASA**: Select “YES” if the patient was taking ASA within two weeks prior to admission (See Appendix F).

58. **Anticoagulants**: Select “YES” if the patient was taking anticoagulants within two weeks prior to admission.

If “YES”, complete this section:

a. Coumadin: Select “YES” if the patient was taking coumadin within two weeks prior to admission (See Appendix G).

b. Heparin: Select “YES” if the patient was taking heparin within two weeks prior to admission (See Appendix G).

59. **NSAIDS** (Nonsteroidal anti-inflammatory drugs): Select “YES” if the patient was taking NSAIDS within two weeks prior to admission (See Appendix F).

60. **Cytotoxins**: Select “YES” if the patient was taking cytotoxins within two weeks prior to admission (See Appendix F).

61. **Steroids**: Select “YES” if the patient was taking steroids within two weeks prior to admission (See Appendix G).

## **Abdominal**

### **Abdominal Disease**

62. **Upper GI Disease**: Includes history of ulcers, gastritis, esophagitis, gastro-esophageal reflux, reflux/hiatal/diaphragmatic hernia, dysphagia or esophageal varices. Upper GI includes the esophagus, stomach and duodenum.

63. **GI Bleeding**: Includes chronic or history (Hx) of gastrointestinal (GI) bleed (bld), UGI bleed, LGI bleed, or bleeding gastric or bleeding duodenal ulcer.





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Also select this option when the record indicates anemia or iron deficiency due to GI bleed.

### **Current Abdominal**

- 64. ***Abdominal Mass:*** Includes inguinal hernia, bulging inguinal mass, abdominal lump or abdominal tumor.
- 65. ***Abdominal Distention:*** Includes bloating, increased abdominal girth or tympany.
- 66. ***Rectal Blood:*** Includes bright red blood per rectum (BRBPR) or passing clots.
- 67. ***Abdominal Rigidity/Guarding/Rebound:*** Includes a positive Murphy's sign.
- 68. ***Ascites:*** Includes positive fluid wave.

### **History of Autoimmune Disease**

- 69. ***Autoimmune Disease:*** Includes collagen vascular disease, connective tissue disease, systemic lupus erythematosus (SLE), scleroderma or rheumatoid arthritis.

### **History Major Organ Surgery**

- 70. ***Major Organ Removal:*** Surgery or removal of any major organ (e.g., lung, liver, bowel, spleen, or kidney). **Excludes appendix, tonsils, adenoids, gallbladder, prostate and uterus.**
- 71. ***Liver Transplant***

### **History of Endocrine/Diabetes**

- 72. ***Chronic Endocrine Disease:*** Includes hyperthyroidism, hypothyroidism, hyperparathyroidism, hyperadrenalism, hypoadrenalism, Addison's disease or pituitary dysfunction.
- 73. ***Diabetes:***

Select (1) if patient has insulin dependent diabetes mellitus (IDDM).

Select (2) if patient is a non-insulin dependent diabetic (NIDDM), borderline diabetic, or is a diabetic who was not on insulin prior to admission.





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74. **HIV+, Symptomatic:** Symptomatic HIV+, AIDS, HIV, HIV positive, acquired immune deficiency syndrome, AIDS related complex or ARC.
75. **HIV+, Asymptomatic:** Same as above but is **asymptomatic**.
76. **Chronic Weight Loss:** Chronic weight loss or inanition.
77. **Chronic Systemic Infection:** Includes viral (e.g., hepatitis), bacterial, fungal and protozoan (e.g., malaria).

### **Urological History**

78. **Flank Pain:** Flank pain or tenderness.
79. **Chronic Renal Failure:** Chronic renal failure requiring dialysis.

### **Musculoskeletal**

#### **History of Musculoskeletal Surgery/Pain**

80. **History of Amputation:** Select “YES” when there is a history of amputation of an arm, leg, and/or surgical removal of fingers and toes. Excludes traumatic amputation of fingers and toes.

If “YES”, indicate where amputation occurred.

81. **History of Hip Surgery:**

If “YES”, indicate extremity:

1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown

- a. Type of replacement:
- 1 = Internal Fixation
  - 2 = Cup Arthroplasty
  - 3 = Osteotomy
  - 4 = Arthrodesis
  - 5 = Gridlestone
  - 6 = Femoral Head Prosthesis (Hemiarthroplasty)
  - 7 = Double Cup (Surface Replacement)
  - 8 = Total Hip Replacement
  - 9 = Unknown
- b. Indicate the number of previous total hip replacements.



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82. ***History of Knee Replacement:***

If "YES", indicate extremity:

1 = Operative Side

2 = Opposite Operative Side

3 = Both

9 = Unknown

83. ***Back Pain:*** All qualifiers and modifiers are accepted.

**Current Musculoskeletal**

**Arthritis**

84. ***Arthritis:*** Includes osteoarthritis or degenerative joint disease.

If "YES", complete this section:

a. ***Rheumatoid Arthritis***

b. ***Juvenile Rheumatoid Arthritis:*** Includes Still's disease.

c. ***Primary Osteoarthritis:*** Includes idiopathic osteoarthritis.

d.. ***Secondary Osteoarthritis:*** Osteoarthritis resulting from infection, trauma, vascular abnormality or hormone imbalance with degeneration of specific joints (not generalized). In order to qualify as a secondary osteoarthritis, there must be a related or pre-existing condition.

e. ***Osteoarthritis, not qualified:*** Select "YES" when there is documentation of osteoarthritis that is not qualified as primary or secondary osteoarthritis.

f. ***Spondylitis:*** Includes ankylosing spondylitis or an inflammation of any spinal vertebrae.

g. ***Other arthritis:*** Select "YES" when there is documentation of various joint disorder (e.g., gout, Lyme's disease, bursitis, migratory polyarthritis, chondrocalcinosis, etc.).

**Arthritis Outside Operated Hip**

85. ***Arthritis outside operated hip:***

If "YES", complete this section:



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- a. ***Arthritis in hip contralateral to operated hip:*** Patient has arthritis in the hip contralateral to the operated hip (originating or affecting the hip opposite to the operative hip).
- b. ***Arthritis in knee ipsilateral to operated hip:*** Patient has arthritis in the knee ipsilateral to the operated hip (originating in or affecting the knee on the same side as the operative hip).
- c. ***Arthritis in back:*** Patient has arthritis or degeneration of the back or spine.
- d. ***Arthritis in knee contralateral to operated hip:*** Patient has arthritis of the knee contralateral to the operated hip (originating in or affecting the knee opposite the operated hip).
- e. ***Arthritis in knee (unspecified):*** Patient has arthritis of the knee unspecified.

## **Range of Motion**

For all range of motion questions, refer to ROM of the affected extremity except for permanent flexion.

If degrees are specified as a range, indicate both the low end and the high end of the range. If only one value is given, indicate the value in the low range box and fill the high range box with "999". If the range of motion type is "NO" or "UNKNOWN", leave the low number and the high number blank. If a range of motion type is specified but you are unable to determine the range or no values are listed, record "999" in the low and high range boxes.

86. ***Type Unspecified:*** Indicate whether a description of the range of motion or the degree of range of motion is specified.
- a. ***Permanent Flexion:*** Contracture **either hip**  
If "YES", indicate extremity:
    - 1 = Operative Side
    - 2 = Opposite Operative Side
    - 3 = Both
    - 9 = Unknown
  - b. ***Flexion in Degrees:*** Affected hip.
  - c. ***Abduction in Degrees:*** Affected hip.
  - d. ***Adduction in Degrees:*** Affected hip.
  - e. ***External Rotation in Extension in Degrees:*** Affected hip.





f. ***Internal Rotation in Extension in Degrees:*** Affected hip.

87. Indicate if there is documentation of the following:

a. During the two weeks prior to surgery, the patient walked (select one option):

- 1 = No more than a step or two
- 2 = Across the room
- 3 = Less than one block
- 4 = More than one block
- 5 = More than ten blocks
- 6 = More than one mile
- 7 = Never did, too painful
- 9 = Unknown

b. Prior to surgery, did the patient have trouble (select one option):

- 1 = Climbing several flights of stairs
- 2 = Climbing one flight of stairs
- 3 = Bending, kneeling or stooping
- 4 = Putting on shoes, socks or stockings
- 9 = Unknown

- Admission Physician H & P
- Admission Physician Progress Notes
- Physician Consultation Notes (done on arrival)
- Admission Nurses Assessment

Listed above, in priority order, are the acceptable locations for abstracting the information for questions # 87c and # 87d. Use the highest priority location for abstracting data.

c. Prior to surgery, did the patient have hip related pain while (enter 0, 1 or 9 for each element):

- 1) Walking
- 2) Sitting
- 3) Climbing Stairs
- 4) Lying in bed at night
- 5) At any other time
- 6) Unknown

d. Prior to surgery, did the patient have pain (enter 0, 1 or 9 for each element):

- 1) In hip
- 2) In thigh
- 3) In buttocks
- 4) In knee





## LABORATORY TESTS

**General Instructions:** Lab results must be obtained from the laboratory reports whenever possible. If the value is illegible or the time the specimen was drawn/collected is missing and this information is needed to determine when the test was performed, the information may be abstracted from anywhere in the medical record. Record the laboratory values as documented in the record, indicate the unit of measurement when applicable and record the date blood was drawn. The following may also be used to assist the abstractor in determining results or times:

- ER Record
- Observation Bed Record
- History and Physical Notes
- Progress Notes
- Nursing Notes

If a specific lab test was not done, enter “0” for the value and leave the code, date and range fields blank unless otherwise specified. If you are unable to determine a lab value and/or range, enter “999” unless otherwise specified. If you are unable to determine a lab date, enter “11/11/11”.

Unless otherwise directed, enter the following codes to indicate whether a test result is within, below or above the hospital’s normal range limits:

- Within normal, enter 1.
- Below normal, enter 2.
- Above normal, enter 3.
- If there is no preoperative lab value documented in the record but the result is noted to be abnormal, enter 4.
- If you are unable to determine whether the test is within normal limits or if the hospital’s range of limits is unavailable, enter 9.

### Laboratory Definitions:

Preoperative: Abstract lab value obtained closest to surgical date. Include test results obtained within 6 weeks prior to admission providing the results are contained or referenced to in the medical record.

Interim: Worst lab value obtained **after the first two days of admission** but excluding the last test performed. If more than one test has the same worst value, select the test from the date closest to discharge. If only one value was obtained two days after admission, enter this as a final value and enter “0” for interim.

Intraoperative: Worst lab value obtained during the operation.



Postoperative: Worst lab value obtained after surgery but excluding the last test performed. If more than one test has the same worst value, select the test from the date closest to discharge.

Final: Last lab test obtained prior to discharge. If the only test performed was preoperative, enter "0".

Worst lab value: The highest value for all tests except Hgb. and Hct., in which case worst means the lowest value.

### **Hematology**

- 88. **Hematocrit:** Abstract preoperative value only.
- 89. **Hemoglobin:** Abstract preoperative value only.
- 90. **WBC:** Abstract preoperative, postoperative and final values as applicable.
- 91. **Prothrombin time:** Abstract preoperative value only.
- 92. **Partial thromboplastin time:** Abstract preoperative value only.

### **Urinalysis**

If a urinalysis was performed in the specified time frame, please indicate the descriptive code for **WBC** and **bacteria** results:

- 0 = Not done
- 1 = Negative: Includes trace, rare, occasional, few, 5 cells and positive bacterial findings as a result of contamination.
- 2 = Positive: Includes anything greater than trace, rare, occasional, few or five cells. Many, clumped and too numerous to count (TNTC) are considered positive findings as is a bacterial finding of 1+ or greater.
- 9 = Unknown

A positive leukocyte esterase is **not** a positive finding. Results should be taken from the microscopic section of the UA.

- 93. **WBC:** Abstract preoperative, postoperative and final values as applicable.
- 94. **Bacteria:** Abstract postoperative and final values as applicable.

### **Microbiology/Culture**

Descriptive codes for **abscess**, **blood** and **sputum** culture results:

- 0 = No culture



## *Elective Total Hip Replacement*

- 1 = No growth
- 2 = Positive: Includes findings of abnormal growth
- 3 = Contaminant
- 9 = Unknown

- 95. **Abscess:** Abstract postoperative, and final values as applicable.
- 96. **Blood:** Abstract postoperative, and final values as applicable.
- 97. **Sputum:** Abstract postoperative, and final values as applicable.

### Descriptive codes for **urine** culture results:

- 0 = No culture
- 1 = <100,000
- 2 =  $\geq$ 100,000 (of a single organism). Includes heavy growth.
- 3 = Contaminant
- 8 = No Growth
- 9 = Unknown

If a range is given (e.g., 50,000 to 150,000) record the worst result.

- 98. **Urine:** Abstract postoperative and final values as applicable.

### Descriptive codes for **wound** and **CSF/joint** fluid cultures:

- 0 = No culture
- 1 = No growth
- 2 = Positive: Includes findings of abnormal growth
- 3 = Contaminant
- 9 = Unknown

- 99. **Wound:** Includes cultures from decubitus ulcers and graft sites. For intraoperative, use cultures from operative site only. Abstract intraoperative, postoperative and final values as applicable.
- 100. **Culture of CSF/Joint Fluid:** Abstract postoperative and final values as applicable.

## DIAGNOSTIC TESTS

### General Instructions:

- Radiology Report
- Physician H&P/ Notes
- Physician Consultant H&P/Notes
- Physician Progress Notes
- Physician Emergency Room Notes/Reports





### *Elective Total Hip Replacement*

Listed above, in priority order are the acceptable locations for obtaining radiology information. Use the highest priority location for abstracting data. Multiple sources may be used. Radiology findings noted pre-arrival, including prior office reports, may be used.

#### **Chest X-ray:**

##### 101. Preoperative Chest X-ray:

If "YES", complete the following:

- a. Date: Most recent, preoperative CXR.
- b. Normal: Select if the findings in #101c - h are not noted in the x-ray report.

If **ABNORMAL**, indicate the abnormality:

- c. Infiltrate: Includes lobar or segmental infiltrates, patchy infiltrates, basilar opacities or pneumonia.
- d. Pleural Effusion: Includes pleural or basal effusion.
- e. Pneumothorax
- f. Pulmonary Edema: Includes pulmonary edema or acute pulmonary edema. **Excludes pulmonary congestion or chronic pulmonary edema.**
- g. Atelectasis: Includes atelectasis, discoid or basilar atelectasis and subsegmental platelike atelectasis.
- h. Congestive Heart Failure: Includes volume or fluid overload, pulmonary vascular congestion or cardiac decompensation.

#### **KUB/Abdominal X-ray**

##### 102. Preoperative KUB/Abdominal X-ray:

If "YES", was it normal?

#### **Preoperative Hip**

##### 103. Preoperative Hip X-ray: If more than one test was done, record the result(s) from the most recent report.

If "YES", was it normal?





If "NO", complete this section:

a. Severe Osteoporosis:

If "YES", indicate extremity:

- 1 = Operative Side
- 2 = Opposite Operative Side
- 3 = Both
- 9 = Unknown

b. Severe Arthritis: Preoperative finding of severe arthritis or end stage arthritis.

If "YES", indicate extremity:

- 1 = Operative Side
- 2 = Opposite Operative Side
- 3 = Both
- 9 = Unknown

c. Femoral Neck Nonunion:

If "YES", indicate extremity:

- 1 = Operative Side
- 2 = Opposite Operative Side
- 3 = Both
- 9 = Unknown

d. Acetabulum Normal: Preoperative finding of a normal acetabulum.

If "YES", indicate extremity:

- 1 = Operative Side
- 2 = Opposite Operative Side
- 3 = Both
- 9 = Unknown

e. Acetabulum Abnormal: Preoperative finding of an abnormal acetabulum.

If "YES" indicate extremity:

- 1 = Operative Side
- 2 = Opposite Operative Side
- 3 = Both
- 9 = Unknown

f. Avascular Necrosis: Preoperative finding of avascular necrosis, aseptic necrosis or Chandler's disease.



If "YES", indicate extremity:

- 1 = Operative Side
- 2 = Opposite Operative Side
- 3 = Both
- 9 = Unknown

- g. Bony Loss: Preoperative finding of bony loss.

If "YES", indicate extremity:

- 1 = Operative Side
- 2 = Opposite Operative Side
- 3 = Both
- 9 = Unknown

- h. Loss of Joint/Articular Space: Preoperative finding of loss of joint/articular space or loss of articular cartilage.

If "YES", indicate extremity:

- 1 = Operative Side
- 2 = Opposite Operative Side
- 3 = Both
- 9 = Unknown

- i. Osteoarthritis/Degenerative Change: Preoperative finding of osteoarthritis, degenerative joint disease, periarticular osteopenia, soft tissue swelling or vertebral subluxation.

If "YES", indicate extremity:

- 1 = Operative Side
- 2 = Opposite Operative Side
- 3 = Both
- 9 = Unknown

- j. Other Preoperative Hip X-ray Findings: Select "YES" when the medical record clearly identifies preoperative findings which do not fit in the categories listed above. Please specify the finding.

### **Postoperative Hip X-ray**

104. *Postoperative Hip X-ray:* If more than one test was done, record the result(s) from the most recent report.

If "YES", was it normal? Select if the findings in #104a - e are not noted in the x-ray report.

If "NO", complete this section.



## *Elective Total Hip Replacement*

a. Fracture of Femur:

If "YES", indicate extremity:

- 1 = Operative Side
- 2 = Opposite Operative Side
- 3 = Both
- 9 = Unknown

b. Fracture of Acetabulum:

If "YES", indicate extremity:

- 1 = Operative Side
- 2 = Opposite Operative Side
- 3 = Both
- 9 = Unknown

c. Prosthesis Component Malposition:

If "YES", indicate extremity:

- 1 = Operative Side
- 2 = Opposite Operative Side
- 3 = Both
- 9 = Unknown

d. Perforation of Stem by Femur:

If "YES", indicate extremity:

- 1 = Operative Side
- 2 = Opposite Operative Side
- 3 = Both
- 9 = Unknown

e. Equipment Failure or Malfunction:

If "YES", indicate extremity:

- 1 = Operative Side
- 2 = Opposite Operative Side
- 3 = Both
- 9 = Unknown

## **CAT Scan - Chest, Body**

105. Postoperative CAT Scan - Chest, Body:



## *Elective Total Hip Replacement*

If "YES", was it normal?

If "ABNORMAL" complete the following:

- a. Chest: Infiltrate: Includes lobar or segmental infiltrates, patchy infiltrates, basilar opacities or pneumonia.
- b. Chest: Pleural Effusion: Includes pleural or basal effusion of the lungs.
- c. Pulmonary Embolism: Includes high, intermediate or moderate probability of pulmonary embolism (PE) or lung embolism.

## **Arteriogram/Angiogram/Venogram**

106. *Arteriogram/Angiogram/Venogram: Preoperatively or postoperatively.*

If "YES", complete this section:

- a. Date: Record the date the test was performed.
- b. Normal

If "NO", complete this section:

- c. Deep Venous Thrombosis: Includes (DVT), thrombus or thrombophlebitis. This does NOT include superficial or IV phlebitis.

If "YES", indicate extremity:

- 1 = Operative Side
- 2 = Opposite Operative Site
- 3 = Both
- 9 = Unknown

## **OPERATIVE EPISODES**

Acceptable sources, in priority order, for abstracting operative information:

- Operative Report
- Anesthesia Record/notes
- Operating Room Nurse Report
- Postoperative Physician Progress Notes
- Recovery Room Record/Post-Anesthesia Record (PAR)





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107. **Operative Episode:** Enter the number to indicate which operative episode you are recording (e.g., 1, 2, 3, etc.).

- a. Date: Enter the date of the procedure. If the procedure was started prior to midnight and continued after midnight, enter the date that anesthesia was **started**.
- b. Start time: Enter in military time. For the “start” time indicate the time that anesthesia was initiated. If the anesthesia sheet does not contain “Start Time”, use the first vital sign time recorded on the anesthesia graphic sheet.
- c. Stop time: Enter in military time. For the “end” time indicate the time that anesthesia was discontinued. If the anesthesia sheet does not contain “End Time” use the last vital sign time recorded on the anesthesia graphic sheet.
- d. ICD - 9 - CM procedure codes: Enter the ICD-9-CM codes for each procedure performed during this operative episode. If only narrative descriptions are available, record “0”. The attestation or facesheet may be used to abstract this information.
- e. Anesthetic Risk: Enter the code indicating the level of anesthetic risk classification for this operative episode (See Appendix B).
- f. Extremity Operated on: Indicate extremity operated on:
  - 1 = Right
  - 2 = Left
  - 3 = Both
  - 9 = Unknown
- g. Anesthesia type: Select the appropriate code to indicate the type of anesthesia used during this operative episode (See Appendix A).
- h. Pathology/Operative findings: Record the findings of this operative episode as defined in Appendix C (1-11).
- i. Operative Information:
  - (1) **High Blood Pressure:** Enter the patient's highest recorded intraoperative blood pressure which occurred from the time the patient entered the operating room until he/she left the recovery room (e.g., highest systolic and diastolic blood pressures). Note these readings may be obtained from different BP checks. Do not record the leading zeros (e.g., if the BP is recorded as 098/088, record 98/88).



- (2) **Low Blood Pressure:** Enter the patient's lowest recorded intraoperative blood pressure which occurred from the time the patient entered the operating room until he/she left the recovery room (e.g., lowest systolic and diastolic blood pressures). Note these readings may be obtained from different BP checks. Do not record the leading zeros (e.g., if the BP is recorded as 098/088, record 98/88).

Palpated blood pressures and pressures obtained with a Doppler are acceptable. When palpated or Doppler blood pressures are used, fill in the systolic pressure and put zeros (00) in the associated diastolic field. For patients with "no palpable pressure", record "00" (zeros) for both systolic and diastolic low readings.

- j. **Estimated blood loss (EBL):** Enter the blood loss in cubic centimeters (cc) which occurred from the time the patient entered the operating room until he/she left the recovery room. Note that the total blood loss may need to be calculated from several sources (e.g., If the intraoperative blood loss is recorded as 200cc and 50cc is emptied from a drain in PACU, record 250cc for the EBL). When there is documentation in the medical record of a minimal or negligible blood loss, record 50 cc. If the record states: "less than X cc blood loss", record X. If the estimated blood loss is zero, -, or "nil", record "0". If the estimated blood loss is unavailable, enter "9999". If the EBL is recorded as a range, record the high value. If there is conflicting information use the following priority order:

- Anesthesiologist Report
- Operative Report
- Progress Notes
- PACU Record

- k. **Surgical Approach:** Listed below in priority order are the acceptable locations for abstracting the surgical approach:

- Physician Operative Report/Progress Notes
- Anesthesia Record
- Nurse Intraoperative Report/Recovery Room Notes

- (1) **Anterior:** Includes Smith-Petersen, Heuter Schede, Callahan, Sutherland-Rowe, Fahey or Luck.
- (2) **Posterior/Posteriolateral:** Includes Lateral Decubitus, Lagenbeck, Kocher, Gibson, Stookey, Ober, Osborne,



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Caldwell, Henry, Marcy-Fletcher, McFarland, Zahradnicek, Moore, Colonna, Burwell, Scott, Jergensen-Abbott or Harris.

- (3) **Anterolateral:** Includes Ollier, Murphygoblet/Brackett and Watson-Jones.
- (4) **Lateral Transtrochanteric Osteotomy:** Includes Hardinge.
- (5) **Other:** Select this option when the surgical approach is clearly and adequately documented but does not fit into the categories outlined above. Specify the approach documented in the medical record.

1. Prosthesis Type and Type of Cement: Listed below in priority order are the acceptable locations for abstracting the prosthesis type and type of cement.

- Operative Report
- Physician Progress Notes
- Physician Consultant Notes
- Intraoperative Nursing Notes

- (1) **Indicate the prosthesis type and type of cement:**

- 1 = Primary cemented
- 2 = Cemented femoral component and biologic ingrowth acetabulum
- 3 = Cemented femoral component and bipolar head articulation
- 4 = Press fit cementless femoral component and bipolar head
- 5 = Cementless
- 9 = Unknown

- (2) **Indicate prosthesis name and type of cement:**

If the prosthesis type is unknown, indicate the prosthesis name and serial number. Include all components. If two lines are noted for the serial number, leave a space between the two lines (e.g., BMAYCC9216852, enter as BMAYCC 9216853.). If the code is illegible, record an asterisk (\*) for the value. Use the following priority order for recording the ID numbers: Serial number, catalog number, Id number. If these numbers are not available, record X. Record the type of cement used for the acetabular and femoral components.

## **OPERATIVE ADVERSE OCCURRENCES**





### *Elective Total Hip Replacement*

**General Instructions:** Refer to the list to identify all adverse intraoperative occurrences that **began** when the patient entered the Operating/Endoscopy room and ended when he/she left the recovery room. All adverse occurrences, whether they were predictable from the patient's condition or not, should be recorded in this screen and must be **documented by a physician**.

Listed below in priority order are the acceptable locations for abstracting the operative adverse occurrences.

- Physician Operative Report/Progress Notes
- Anesthesia Record

#### 108. *Adverse Operative Occurrences:*

If "YES", identify:

- a. AMI: Acute myocardial infarction (AMI).
- b. Respiratory Arrest: Documentation indicates that breathing stopped, respirations ceased or patient experienced respiratory/ cardiopulmonary arrest.
- c. Sustained Arrhythmia: Sustained arrhythmia is defined as a run of ventricular tachycardia lasting more than 20 beats, run of sustained ventricular tachycardia (SVT), run of ventricular tachycardia (VT or V-tach), atrial fibrillation or atrial flutter if this is not the patient's underlying rhythm.
- d. Cardiac Arrest: Cardiac arrest, ventricular fibrillation (V-fib) or cardiopulmonary arrest.
- e. Hyperthermia: Includes hyperpyrexia or a temperature greater than 101<sup>0</sup>F or 38.3<sup>0</sup>C.
- f. Seizure: Includes epileptic attack.
- g. Stroke: Includes cerebral vascular accident (CVA), infarct, transient ischemic attack (TIA), cerebral embolism, cerebral thrombolism or cerebral infarct.
- h. Uncontrolled Bleeding or Shock: Includes intraoperative complication of hemorrhage, uncontrolled bleeding, bleeding >300 cc or shock. Includes cardiogenic shock, septic shock, cardiovascular or intravascular collapse or any type of shock. This is also defined as blood loss greater than 500 cc.





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### i. Fracture of the Femur:

If “YES”, indicate extremity:

1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown

### j. Fracture of the Acetabulum:

If “YES”, indicate extremity:

1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown

### k. Prosthesis Component Malposition: This is defined as a prosthesis that is poorly positioned.

If “YES”, indicate extremity:

1 = Operative Side  
2 = Opposite Operative Side  
3 = Both  
9 = Unknown

### l. Perforation of Stem by Femur

### m. Equipment Failure or Malfunction

### n. Major Vessel Damage

### o. Other Adverse Occurrences: Select “YES” when the medical record adequately and clearly identifies intraoperative findings which do not fit in the categories listed above. Please specify the occurrence.

## **TREATMENT INTERVENTIONS**

**General Instructions:** Document all treatment interventions which occurred during this hospital admission.

- Physician Notes
- Operative Report
- Nursing Notes/Flowsheets
- ICU Flowsheets
- Anesthesia Record/Notes



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- Operating Room Nurse Report
- Recovery Room Record
- Post-Anesthesia Record (PAR)

Listed above are the acceptable locations for abstracting the information regarding drains and foley catheters. If information from one location conflicts with information from another location, the above list should be considered priority order.

#### 109. *Surgical Drains:*

If “YES”, indicate the drain type:

- a. Open: e.g., penrose
- b. Closed: e.g., Jackson Pratt, Hemovac

#### 110. *Foley Catheter:* Indwelling

### **Embolic Prophylaxis**

111. *Preoperative Embolic Prophylaxis:* Select “YES” if the patient received preoperative embolic prophylaxis during this hospitalization. If “YES” complete this section. If “NO” or “UNKNOWN”, skip to question #112.

- Physician Notes
- Nursing Notes/Flowsheets

Listed above are the acceptable locations for abstracting the preoperative embolic prophylaxis information. If information from one location conflicts with information from another location, the above list should be considered priority order.

- a. Heparin: Select “YES” if the patient received heparin therapy preoperatively (See Appendix G).
- b. Coumadin: Select “YES” if the patient received coumadin therapy preoperatively (See Appendix G).
- c. ASA: Select “YES” if the patient received aspirin therapy preoperatively (See Appendix F).
- d. TEDS: Select “YES” if the patient received TEDS preoperatively. Includes sequential TEDS, sequential compression stockings, compression stockings, elastic stockings/hose or antiembolism stockings/hose.



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- e. Other: Select “YES” when documentation clearly and adequately identifies another preoperative embolic prophylaxis which does not fit into the categories outlined above. Specify the treatment documented in the medical record.

112. ***Incentive Spirometer:*** Select “YES” when documentation indicates the patient used an incentive spirometer **postoperatively**.

Acceptable sources for collecting postoperative embolic prophylaxis information, in priority order:

- Physician Notes
- Nursing Notes/Flowsheets

113. ***Postoperative Embolic Prophylaxis***

If “YES”, complete this section.

- a. Heparin: Select “YES” if the patient received heparin therapy postoperatively (See Appendix G).
- b. Coumadin: Select “YES” if the patient received coumadin therapy postoperatively (See Appendix G).
- c. ASA: Select “YES” if the patient received aspirin therapy postoperatively (See Appendix F).
- d. CPM: Continuous passive motion therapy.
- e. TEDS: Select “YES” if the patient received TEDS postoperatively. Includes sequential TEDS, sequential compression stockings, compression stockings, elastic stockings/hose or antiembolism stockings/hose, sequential TEDS, sequential compression stocking, or compression stockings
- f. Other: Documentation of other postoperative embolic prophylaxis which does not fit into the categories outlined above. Specify the treatment documented in the medical record.

114. ***Blood Products:***

Acceptable sources for collecting blood products information:

- Blood Administration Record
- Physician Progress Notes
- Nursing Progress Notes/Flowsheets





### *Elective Total Hip Replacement*

- Lab Slips
- IV Flowsheets
- Anesthesia Notes

If “YES”, indicate whether the patient received:

- a. Autologous Blood: Indicate whether RBC’s or whole blood given.
- b. Homologous Blood: Indicate whether RBC’s or whole blood given.
- c. RBC’s
- d. Whole Blood
- e. Platelets/Platelet Concentrate
- f. Fresh Frozen Plasma (FFP)
- g. Cell-saver: Includes autovac, solcotron, and constavac (c-vac).  
Abstract only if blood was reinfused through a cell-saver.

Acceptable sources for physical therapy questions #115-118. If information from one location conflicts with information from another location, the following should be considered priority order.

- Physical Therapy Notes
- Physician Notes
- Nursing Notes/Flowsheets
- ICU Flowsheets

115. **Patient Education:** Select “YES” when there is documentation that the patient received instructions from physical therapy.
116. **Date of First PT Visit:** Record the date of the first physical therapy visit. If you are unable to determine the date of the first physical therapy visit, record “11/11/11”.
117. **Number of PT Visits:** Record the number of physical therapy visits. Any verbal or physical contact made with the patient is considered a visit. If you are unable to determine the number of physical therapy visits, record “999”.
118. **Date Patient First Started to Ambulate:** Record the date the patient first started to ambulate or stand and pivot.

### **PRESCRIBED MEDS**

Acceptable sources for medication administration:

- Medication Administration Records
- Preoperative/Preprocedure Checklist
- IV Flowsheets
- ICU Flowsheets





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- Operative Report
- Anesthesia Records
- Post Anesthesia Care Records
- Emergency Room Records

119. **Initial Antibiotics:** Record the date patient received the first dose of antibiotics during this hospitalization. Record "12/12/12" if antibiotics were never ordered. Record "11/11/11" if you are unable to determine if antibiotics were ordered.
120. **Preoperative Antibiotics:** Indicate whether the patient received preoperative antibiotics during this hospitalization.

If "NO" preoperative antibiotics given or "UNKNOWN", enter "0" and skip to #121. If "YES", continue.

- a. **Antibiotic # 1:** Enter the code to identify the first preoperative antibiotic using selections in Appendix E.
- b. **Time of Administration # 1:** Enter the code to identify when the **last** dose of antibiotic was received before surgery start time.
- 1 = Last dose received < 24 hours before surgery.  
2 = Last dose received  $\geq 24 - \leq 36$  hrs before surgery.  
3 = Last dose received > 36 -  $\leq 48$  hrs before surgery.  
4 = Last dose received > 48 -  $\leq 72$  hrs before surgery.  
5 = Last dose received > 72 hrs before surgery.  
9 = Unknown
- c. **Antibiotic # 2:** Enter the code to identify the second preoperative antibiotic using selections in Appendix E. If only one antibiotic was given as recorded above, enter "0" and skip to Question #120e.
- d. **Time of Administration # 2:** If an antibiotic is recorded in #120c, please enter the time code as outlined in #120b.
- e. **Antibiotic # 3:** Enter the code to identify the third preoperative antibiotic using selections in Appendix E. If no third antibiotic was given, enter "0" and skip to Question #121.
- f. **Time of Administration # 3:** If an antibiotic is recorded in #120e, please enter the time code as outlined in #120b.

121. **Intraoperative Antibiotics:**



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If “NO” intraoperative antibiotics or “UNKNOWN”, enter "0" and skip to #122. If “YES”, continue.

- a. Antibiotic # 1: Enter the code to identify the first intraoperative antibiotic using selections in Appendix E.
- b. Antibiotic # 2: Enter the code to identify the second postoperative antibiotic using selections in Appendix E.
- c. Antibiotic # 3: Enter the code to identify the second postoperative antibiotic using selections in Appendix E.

122. **Postoperative Antibiotics:** Indicate whether the patient received postoperative antibiotics. Listed below are the acceptable locations for abstracting this information.

- Operative Report
- Anesthesia Records
- Postoperative Medication Administration Records
- Post Anesthesia Care Records
- ICU Flowsheets

If “NO” postoperative antibiotics or “UNKNOWN”, enter "0" and skip to Question #123. If postoperative antibiotics given, continue:

- a. Antibiotic # 1: Enter the code to identify the **first** postoperative antibiotic using selections in Appendix E.
- b. Time of Administration # 1: Enter the code to identify the **first** antibiotic received after the surgery end time.
  - 1 = First dose received < 24 hours after surgery.
  - 2 = First dose received  $\geq 24$  -  $\leq 36$  hrs after surgery.
  - 3 = First dose received > 36 -  $\leq 48$  hrs after surgery.
  - 4 = First dose received > 48 -  $\leq 72$  hrs before surgery.
  - 5 = First dose received > 72 hrs after surgery.
  - 9 = Unknown
- c. Antibiotic # 2: Enter the code to identify the second postoperative antibiotic using selections in Appendix E. If only one antibiotic was given as recorded above, enter "0" and skip to Question #122e.
- d. Time of Administration # 2: If an antibiotic is recorded in #122c, please enter the time code as outlined in #122b.



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- e. Antibiotic # 3: Enter the code to identify the third postoperative antibiotic using selections in Appendix E. If no third antibiotic was given, enter "0" and skip to Question #123.
- f. Time of Administration # 3: If an antibiotic is recorded in #122e, please enter the time code as outlined in #122b.

123. **Adverse Reaction to Medication:** Allergic reaction, intolerance or side effect to a medication.

## POSTOPERATIVE COMPLICATIONS

### GENERAL POSTOPERATIVE COMPLICATIONS

**General Instructions:** Refer to the list to indicate all postoperative complications that occurred after the patient left the recovery room. All postoperative complications, should be recorded in this screen and **must be documented by a physician or a nurse.**

This information may be found in:

- Postoperative Physician Notes
- Postoperative Physician Consultant Notes
- Postoperative Nursing Notes

124. Did the patient experience **postoperative complications** following transfer out of the recovery room?

If "YES", identify the postoperative complication(s):

- a. Cardiac Arrest: Includes ventricular fibrillation (V-fib) or cardiopulmonary arrest.
- b. Shock: Includes hypovolemic shock, cardiogenic shock, septic shock, endotoxic shock, anaphylactic shock, shock due to cardiovascular or intravascular collapse, drug/transfusion reaction or any type of shock.
- c. Deep Vein Thrombosis: Includes (DVT), thrombus or thrombophlebitis. This does NOT include superficial or IV phlebitis.

If "YES", indicate extremity:

- 1 = Operative Side
- 2 = Opposite Operative Side
- 3 = Both
- 9 = Unknown





- d. Operative Site Bleeding: Includes hemorrhage, active bleeding/hemorrhage noted at operative site or documentation that dressings were changed two or more times per day because they were saturated with bloody serous drainage.
- e. GI Hemorrhage, Occult Blood, Guaiac + Stool: Select "YES" when there is documentation of a general complication of GI hemorrhage, occult blood or guaiac + stool.
- f. GI Hemorrhage, Moderate Active Bleeding: Includes postoperative complications of GI hemorrhage or moderate active bleeding. Moderate GI hemorrhage is a GI hemorrhage requiring less than 2 units of blood.
- g. GI Hemorrhage, Massive Bleeding: Massive GI hemorrhage is a GI hemorrhage requiring 2 or more units of blood.
- h. Pulmonary Edema: Includes congestive heart failure (CHF) or acute pulmonary edema. This option does not include pulmonary congestion, chronic congestive heart failure or chronic pulmonary edema.
- i. Pulmonary Embolism: Includes high, intermediate, or moderate probability of pulmonary embolism (PE), lung embolism or positive VQ.
- j. Wound Infection/Abscess: Includes postoperative wound infection/abscess.
- k. Wound Failure (partial or complete): Includes partial or total wound failure or dehiscence.
- l. Atelectasis: Includes atelectasis, collapsed lung, collapsed right or left lobe, or subsegmental platelike atelectasis. This option does NOT include discoid or basilar atelectasis.
- m. Hematoma at Operative Site
- n. Myocardial Infarction: Includes acute myocardial infarction (AMI) or myocardial infarction (MI).
- o. CVA: Includes stroke, cerebral vascular accident (CVA), stroke, cerebrovascular incident (CVI), cerebral hemorrhage, cerebral occlusion, cerebral thrombosis, subarachnoid hemorrhage (SAH), intracranial hemorrhage, brain infarct or cerebral infarct.





- p. *Pneumonia:* Includes lobar or segmental infiltrates, patchy infiltrates, basilar opacities or pneumonia.
- q. *Respiratory Failure:* Includes respiratory arrest.
- r. *Urinary Retention:* Postoperative retention of urine. Abstract when the nurse notes bladder distention or patient complains of inability to void and patient is catheterized.
- s. *Arrhythmias:*

If "YES", identify the arrhythmia:

- 1 = **Sustained Ventricular Tachycardia:** Ventricular tachycardia lasting 10 seconds or more or literal documentation of sustained ventricular tachycardia or sustained V-tach.
- 2 = **Heart Block, 2nd degree:** Includes second degree AV block, Wenckebach block, Mobitz type I, Mobitz type II or second degree heart block.
- 3 = **Heart Block, 3rd degree:** Includes complete heart block or AV dissociation.
- 4 = **Supraventricular Arrhythmia:** Includes SVT, supraventricular arrhythmia, atrial fibrillation, atrial flutter, atrial tachycardia, atrial couplets or paroxysmal atrial tachycardia (PAT).
- 5 = **Ventricular Arrhythmia:** Includes frequent multifocal or multiform PVCs, ventricular couplets, bigeminy, ventricular triplets, trigeminy, ventricular tachycardia, runs of ventricular tachycardia, V-tach, salvos or ventricular fibrillation.
- 6 = **Sinus Node Dysfunction:** Includes SA block, SA arrest or sick sinus syndrome.
- 7 = **Non-malignant bradycardia/tachyarrhythmia:** Includes sinus bradycardia, bradycardia, non-malignant bradycardia, sinus tachycardia, tachycardia or tachyarrhythmia.

- t. *Coma*



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- u. Gastric "Stress" Ulcer
- v. Neuropathy
- w. Bacteremia
- x. CHF: Includes complication of congestive heart failure, pump failure, volume or fluid overload, pulmonary vascular congestion or cardiac decompensation.
- y. UTI: Includes a positive urine culture.
- z. Intubation  $\geq$  to 24 hours post surgery: Includes complication of intubation greater than or equal to 24 hours post surgery.
- aa. Death
- bb. Renal Failure
- cc. ATN (acute tubular necrosis) not requiring dialysis: Creatinine 1.0 over baseline creatinine: Includes renal failure which does not require dialysis.
- dd. Infection > 72 hours after admission
- ee. Temperature > 38.5C or 101.3F
- ff. Antibiotics given: Record any antibiotic given for an infection before discharge. Do not abstract antibiotics given prophylactically.
- gg. Other: A postoperative complication is documented but does not fit into any of the other categories. Please specify.

## **Postoperative Orthopedic Complications**

125. **Postoperative Orthopedic Complications**: Indicate whether the patient experienced postoperative orthopedic complications following transfer out of the recovery room.  
If "YES", continue with this section:

- a. Fracture of the Femur:

If "YES", indicate extremity:

1 = Operative Side  
2 = Opposite Operative Site  
3 = Both



9 = Unknown

b. Fracture of the Acetabulum:

If "YES", indicate extremity:

1 = Operative Side  
2 = Opposite Operative Site  
3 = Both  
9 = Unknown

c. Prosthesis Component Malposition: This is defined as a poorly positioned prosthesis.

If "YES", indicate extremity:

1 = Operative Side  
2 = Opposite Operative Site  
3 = Both  
9 = Unknown

d. Perforation of Stem by Femur:

If "YES", indicate extremity:

1 = Operative Side  
2 = Opposite Operative Site  
3 = Both  
9 = Unknown

e. Equipment Failure or Malfunction

f. Major Vessel Damage

g. Sciatic Nerve Damage or Palsy

h. Femoral Nerve Damage or Palsy:

If "YES", indicate extremity:

1 = Operative Side  
2 = Opposite Operative Site  
3 = Both  
9 = Unknown

i. Limb Ischemia:

If "YES", indicate extremity:

1 = Operative Side  
2 = Opposite Operative Site



3 = Both  
9 = Unknown

- j. Dislocation of Components: Dislocation of prosthesis (e.g., retroversion of the cup).

If "YES", indicate extremity:

1 = Operative Side  
2 = Opposite Operative Site  
3 = Both  
9 = Unknown

- k. Unrecognized Malposition of Components

- l. Component Failure: This is related to how the prosthesis is attached (e.g. separation).

If "YES", indicate extremity:

1 = Operative Side  
2 = Opposite Operative Site  
3 = Both  
9 = Unknown

- m. Fixation Failure:

If "YES", indicate the extremity:

1 = Operative Side  
2 = Opposite Operative Site  
3 = Both  
9 = Unknown

- n. Osteomyelitis:

- o. Trochanteric Bursitis: Includes inflammation of the bursa between the tendon of the gluteus maximus and the posterior lateral surface of the greater trochanter.

If "YES", indicate the extremity:

1 = Operative Side  
2 = Opposite Operative Site  
3 = Both  
9 = Unknown

- p. Trochanteric Nonunion:

If "YES", indicate the extremity:







1 = Operative Side  
2 = Opposite Operative Site  
3 = Both  
9 = Unknown

q. Subluxation:

If "YES", indicate the extremity:

1 = Operative Side  
2 = Opposite Operative Site  
3 = Both  
9 = Unknown

r. Other findings: Select this option when there is clear and adequate documentation of other postoperative orthopedic complications not included in either of the above lists. Please specify the finding in the space provided.

**TRAUMA SUFFERED IN HOSPITAL**

126. *Trauma suffered in hospital:*

If "YES", identify the trauma:

- a. Decubitus Ulcer: Decubitus ulcer greater than Stage I occurred during this hospital stay. This option is NOT to be selected for decubitus ulcers which developed prior to this stay.
- b. Accidental injury: Includes but is not limited to: injuries as a result of an assault (e.g., an assault by an employee, another person, a visitor), burns from food/beverage, injury from transport within the hospital, injuries from use of orthopedic equipment or PAS hose injuries. This does not include medication errors, IV infiltrates or falls.
- c. Fall
- d. Other: Patient suffered a trauma in the hospital but it is not listed in the above categories. Please specify.

**DISCHARGE PLAN/STATUS**

127. *Discharge ADL/Continence:*

- a. Bladder Continence: Select the appropriate code to record the patient's level of bladder continence on discharge from the hospital.



- 3 = **Transfer to swing, SNF or ICF:** Patient was transferred to a freestanding or hospital based skilled nursing facility (SNF), swing bed for SNF care or an intermediate care facility (ICF).
- 4 = **Transfer to Rehabilitation Facility**
- 5 = **Transfer to other institution:** Facility other than an acute care hospital, SNF or swing bed.
- 6 = **Transfer to Home Health:** Patient was transferred to a home health service program.
- 7 = **Left Against Medical Advice:** Patient left without a physician's order or against medical advice.
- 8 = **Expired**
- 9 = **Unknown:** Unable to determine the patient's disposition at discharge.

130-131. ***Final listing of diagnoses and procedures:***

*Diagnoses/Procedures:* If present, list all diagnoses and procedures for this hospital stay as shown on the attestation form. Admitting diagnosis may be abstracted from the facesheet. If only a narrative description is available, record "0" for the ICD-9-CM code.







## Medicare Data

For each patient in this study (n=1133 elective hip replacement patients; n=1569 cholecystectomy patients) Medicare claims for one year prior to discharge and for one year post discharge were extracted from each of the following files:

Denominator

MEDPAR

Hospice

Outpatient

HHA

Cross-Reference Finder

DME File

Physician/Supplier Part B





APPENDIX A

APPENDIX B

APPENDIX C



## Appendix A

### Condition Identification Panel Members

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Expert in epidemiology of aging and  
data collection from the elderly



APPENDIX D

APPENDIX B

APPENDIX C



**Appendix B**  
**Conditions Matrix**  
**Post Hospitalization Outcomes Study**

**Conditions by DRGs (1989)**

<u>Description</u>	<u>DRG Number</u>	<u>Rank</u>	<u>Number of Discharges</u>	<u>Percent of Discharges</u>	<u>Total Payments in Thousands</u>	<u>Average Length of Hospital Stay</u>	<u>Average Payment per Discharge</u>	<u>No. of Discharges Annually per 200 Bed Hosp*</u>	<u>No. of Weeks Needed to Accrue Sample**</u>
Heart Failure and Shock	127	1	494,866	5.5	\$1,956,574	7.9	\$3,954	133	4
Simple Pneumonia and Pleurisy, over 17 w/complications	089	2	328,212	3.6	1,519,931	9.0	4,631	87	7
Angina Pectoris	140	3	325,789	3.6	756,112	4.7	2,321	87	7
Specific Cerebrovascular Disorders except transient ischemic attack	014	4	301,421	3.3	1,493,474	10.6	4,955	80	7
Esophagitis, Gastroenteritis & miscellaneous Digestive Disorders, age over 17	182	5	228,505	2.5	635,634	6.3	2,782	61	10
Major joint and limb reattachment procedures	209	6	200,306	2.2	1,752,716	11.9	8,750	53	11
Bronchitis & asthma, age over 17 w/complicating disorders	096	7	199,669	2.2	725,935	7.2	3,636	53	11
Nutritional & miscellaneous metabolic disorders, age over 17 w/complications	296	8	180,786	2.0	688,512	8.6	3,808	48	12
Cardiac arrhythmia & conduction disorders, w/complicating conditions	138	9	167,134	1.8	531,968	6.1	3,183	44	13
Kidney & urinary tract infections, age over 17 w/complications	320	10	135,293	1.5	550,852	8.6	4,072	36	16
Circulatory disorders w/acute myocardial infarction & complications	121	11	134,627	1.5	782,427	10.1	5,812	36	16
Gastrointestinal hemorrhage w/complications	174	12	130,910	1.4	484,638	7.0	3,702	34	17
Transient ischemic attack & precerebral occlusions	015	13	127,849	1.4	308,844	5.5	2,416	34	17
Chemotherapy	410	14	122,839	1.4	242,091	3.5	1,971	34	17
Major small & large bowel procedures w/complicating conditions	148	15	121,693	1.3	1,610,541	17.1	13,234	31	18
Circulatory disorders w/ acute myocardial infarction w/o complications	122	16	111,177	1.2	424,474	7.2	3,818	29	20
Medical back problems	243	17	111,068	1.2	277,746	6.8	2,501	29	20
Vascular procedures except major reconstruction, w/o pump	112	18	109,410	1.2	809,854	7.1	7,402	29	20
Respiratory infections & inflammation, age over 17 w/complications	079	19	105,120	1.2	814,050	12.3	7,744	29	20
Septicemia, age over 17	416	20	103,972	1.1	647,108	10.6	6,224	27	22
Transurethral prostatectomy w/complicating conditions	336	21	97,779	1.1	367,000	6.4	3,753	27	22
Chest pain	143	22	95,292	1.1	187,791	3.5	1,971	27	22
Hip & femur procedures except major joint, over 17 w/complications	210	23	95,021	1.0	782,239	14.4	8,232	24	24
Circulatory disorders w/ cardiovascular catheter w/o complex diagnosis	125	24	88,042	1.0	227,997	3.1	2,590	24	24
Circulatory disorders w/cardiovascular catheter w/complex diagnosis	124	25	87,262	1.0	396,281	6.1	4,541	24	24

\* Based upon an average number of Medicare discharges per year in 200 bed hospitals

\*\* Based upon a sample size of 1110 and data collection in 100 different hospitals





# Admitting Diagnosis (1986)

<u>Description</u>	<u>Rank</u>	<u>Number of Admissions</u>
Heart failure and shock	1	477,913
Simple pneumonia and pleurisy	2	353,193
Angina pectoris	3	318,014
Specific cerebrovascular disorders except transient ischemic attack	5	301,884
Esophagitis, gastroenteritis and misc. digestive disorders	6	300,137
Major joint and limb reattachment procedures	11	169,817
Bronchitis & asthma	9	196,617
Nutritional and misc metabolic disorders	8	210,136
Cardiac arrhythmia and conduction disorders	7	223,977
Kidney and urinary tract infections	13	154,511
Acute myocardial infarction	4	302,437
Gastrointestinal hemorrhage	14	153,077
Transient ischemic attack and precerebral occlusions	12	154,829
Chemotherapy		
Major small and large bowel procedures		
Medical back problems		
Vascular procedures		
Respiratory infections and inflammation		
Septicemia		
Transurethral prostatectomy	10	184,843
Chest pain		
Hip and femur procedures		
Circulatory disorders	15	136,004

Source: The Codman Research Group, Inc.



# Propensity to Use Post-Hospital Care (1984-1985)

<u>Description</u>	<u>DRG Number</u>	PERCENT/TOTAL MEDICARE-COVERED CHARGES BY MODALITY			PERCENT/TOTAL HOSPITAL DISCHARGES BY MODALITY		
		<u>SNF</u>	Home Health <u>Care</u>	<u>Rehabilitation</u>	<u>SNF</u>	Home Health <u>Care</u>	<u>Rehabilitation</u>
Heart Failure and Shock	127	2.5	5.8	5.8	2.1	17.8	
Simple Pneumonia and Pleurisy, over 17 w/complications	089	2.8	2.9	2.9	3.5	12.1	
Angina Pectoris	140		1.7	1.8		8.3	
Specific Cerebrovascular Disorders except transient ischemic attack	014	16.6	6.7	7.3	13.3	21.7	6.8
Esophagitis, Gastroenteritis & misc Digestive Disorders, age over 17	182	0.9	2.1	2.2	1.0		
Major joint and limb reattachment procedures	209	8.4	4.5	3.9	15.7	32.0	2.4
Bronchitis & asthma, age over 17 w/complicating disorders	096		1.4	1.4		11.8	
Nutritional & misc metabolic disorders, age over 17 w/complications	296	2.5	2.8	2.9	4.7	18.3	
Cardiac arrhythmia & conduction disorders, w/ complicating conditions	138		1.4	1.4		10.3	
Kidney & urinary tract infections, age over 17 w complications	320	1.6	2.0	2.5	4.6	17.7	
Circulatory disorders w/ acute myocardial infarction & complications	121		1.3	1.1		17.6	
Gastrointestinal hemorrhage w/ complications	174	0.8	1.1	1.2	2.2	10.8	
Transient ischemic attack & precerebral occlusions	015		1.4	1.5		12.0	0.4
Chemotherapy	410						
Major small & large bowel procedures w/ complicating conditions	148	1.3	2.0	1.7	4.2	22.0	
Circulatory disorders w/ acute myocardial infarction w/o complications	122					10.4	
Medical back problems	243	1.1	1.7	1.6	2.1	12.3	
Vascular procedures except major reconstruction, without pump	112						
Respiratory infections & inflammation, age over 17 w/ complications	079	1.6			8.4		
Septicemia, age over 17	416	1.2		1.0	6.2		
Transurethral prostatectomy w/ complicating conditions	336						
Chest pain	143						
Hip & femur procedures except major joint, over 17 w/ complications	210	13.5	3.6	3.3	31.1	31.5	2.9
Circulatory disorders w/ cardiovascular catheter w/o complex diag	125						
Circulatory disorders w/ cardiovascular catheter w/ complex diagnosis	124						

1

\* Based upon an average number of Medicare discharges per year in 200 bed hospitals

\*\* Based upon a sample size of 1110 and data collection in 100 different hospitals



## Potential Clinical Outcomes

<u>Description</u>	<u>Improvements, Stabilization or Deterioration of Symptoms</u>	<u>Adverse Outcomes</u>	<u>Iatrogenic Complications</u>
Heart failure and shock	Shortness of breath/dyspnea (with activity, when lying down, at night); weight gain/edema; irregular heart rate/arrhythmias; fast heart rate; chest pain; rapid breathing	Death; myocardial infarction; respiratory failure; readmission; deep venous thrombosis/pulmonary embolism (DVT/PE)	Electrolyte abnormalities; hospital acquired infections; aspirin associated gastricity and/or hemorrhage
Simple pneumonia and pleurisy	Productive cough/persistent cough	Death; respiratory failure; readmission; DVT/PE	Hospital acquired infections
Angina pectoris	Chest pain with exertion; shortness of breath/with exertion; arm or shoulder pain; jaw or tooth pain; rapid breathing; chest pain at rest; use of nitroglycerin	Death; myocardial infarction; readmission; congestive heart failure; DVT/PE	Hospital acquired infections; aspirin associated gastricity and/or hemorrhage
Specific cerebrovascular disorders except transient ischemic attack	Speech, ambulation; extremity strength; fine motor movement/finger movement; bowel and/or bladder incontinence; comprehension; vision; ability to swallow	Death; readmission; contractures; recurrent cerebrovascular accident; DVT/PE	Hospital acquired infections; radiocontrast dye reaction/dye induced renal failure; aspirin associated gastricity and/or hemorrhage
Esophagitis, gastroenteritis and miscellaneous digestive disorders	Abdominal pain; nausea; vomiting; diarrhea; bloody vomitus/hematemesis; fever; bloody stools	Surgery; death; readmission; blood transfusion	Hospital acquired infections; blood transfusion associated infection and/or reaction
Major joint and limb reattachment procedures	ambulation; pain; swelling; strength; climbing stairs; getting in and out of car	Death; readmission; recurrent surgery; DVT/PE	Surgical wound infection; prosthesis infection; blood transfusion infection/reaction; other hospital acquired infections
Bronchitis and asthma	Cough; sputum production; shortness of breath; wheezing; rapid breathing; fever; use of inhaled bronchodilators	Death; respiratory failure; readmission; DVT/PE; pneumonia	Hospital acquired infections
Nutritional and miscellaneous metabolic disorders			
Cardiac arrhythmia and conduction disorders	Slow heart rate; fast heart rate; irregular heart rhythm; fainting/syncope; lightheadedness/dizziness; palpitations; shortness of breath; chest pain	Death; myocardial infarction; readmission; congestive heart failure; DVT/PE	Hospital acquired infections





Kidney and urinary tract infections	Fever; pain w/urination/dysuria; frequent urination; abdominal pain; flank pain; chills; sweating; diaphoresis/nausea	Death; readmission; DVT/PE	Hospital acquired infections
Circulatory disorders with acute myocardial infarction	Chest pain; arm or shoulder pain; neck or jaw pain; shortness of breath, w/exertion, sweating/diaphoresis; irregular heart rhythm; slow or rapid heart rate; palpitations	Death, readmission, surgery	Hospital acquired infections; blood transfusion associated infection
Transient ischemic attack and precerebral occlusions	Slurred speech; confusion; disturbed vision; weakness; numbness	Death; readmission; DVT/PE; cerebrovascular accident; cerebral hemorrhage	Hospital acquired infections; radiocontrast dye reaction/dye induced insufficiency; anticoagulant/aspirin assoc hemorrhage/gastritis
Chemotherapy			
Major small and large bowel procedures	Diarrhea; constipation; nausea/vomiting		
Medical back problems	Back pain/neck pain; leg pain/arm pain; leg weakness/arm weakness; numbness	Readmission; surgery; DVT/PE bladder and/or bowel incontinence; narcotic dependence	nonsteroid antiinflammatory drug associated gastritis or hemorrhage; radiocontrast dye reaction; renal failure; hospital acquired infections
Vascular procedures except major reconstruction			
Respiratory infections and inflammation	Fever; chills; weight loss; shortness of breath; cough; sputum production; night sweats	Death; readmission; pulmonary hemorrhages; pneumothorax; DVT/PE	Hospital acquired infections; thoracentesis associated pneumothorax and/or hemorrhages
Septicemia		Death; readmission; acute renal failure (renal insufficiency); seizures	Hospital acquired infections
Transurethral prostatectomy	Urinary frequency/hesitancy; nocturia; urinary dribbling; pain with urination	Death; readmission; urinary retention/obstruct; stricture formation; blood transfusion; myocardial infarction; renal insufficiency; failure; DVT/PE	Hospital acquired infections; impotence
Chest pain		Death; readmission; myocardial infarction	Hospital acquired infection



Hip and femur procedures except major joint	Ambulation; pain; strength; swelling; climbing stairs; getting in and out of car	Death; recurrent surgery; readmission/ DVT/PE	Surgical wound infection; prosthesis infection; blood transfusion infection/reaction; other hospital acquired infections
Circulatory disorders with cardiovascular catheter		Reinfarction; readmission; death; congestive heart failure; cardiac arrhythmia/conduction disorders; DVT/PE	Hospital acquired infection; aspirin associated gastritis and/or hemorrhage; anticoagulant associated hemorrhage



APPENDIX D

APPENDIX E

APPENDIX C



## Appendix C

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APPENDIX D

APPENDIX E

APPENDIX F



**Appendix D**  
**Condition Specification Panels**

Total Hip Replacement

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Has done research on the outcomes of total hip replacement

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Member of Cholelithiasis PORT, participated in the development of Inter-Study's Outcomes Management System for cholecystectomy

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Investigator on the Pneumonia PORT

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Expert on infectious diseases and decision analysis



### General Outcomes Panel

In addition to the CSPs a fifth panel of experts familiar with outcome measures was convened.

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Expert in quality of life measures

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Expert in epidemiology of aging and data collection from the elderly

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Expert in multidimensional measures of health and well-being, especially the SF-36









# Appendix E

## Comparison of Questions Across Surveys

Survey Questions	2 weeks			Cholecystectomy 4-6 months			1 year			Elective Total Hip Replacement 4-6 months			1 year		
	Patient	Proxy		Patient	Proxy		Patient	Proxy		Patient	Proxy		Patient	Proxy	
<b>I. Demographics</b>															
A. What is the highest level in school that you have completed?	X	X													
B. What is your (and your spouse's) total yearly income from all sources?	X	X													
C. Which category is closest to your total yearly income?	X	X													
<b>II. Living Arrangements</b>															
A. During the past two weeks, did you live in:	X	X		X	X		X	X		X	X		X	X	
B. During the past two weeks, did you live alone?	X	X		X	X		X	X		X	X		X	X	
C. At present, who else lives in the household?	X	X		X	X		X	X		X	X		X	X	
D. I'd like to know the places you stayed since you left the hospital ____ weeks ago.															
1. Did you move after that?				X	X		X	X		X	X		X	X	
<b>III. ADLs</b>															
A. During the past two weeks:															
1. did you bathe or shower other than taking a sponge bath	X	X		X	X		X	X		X	X		X	X	
2. did you dress yourself	X	X		X	X		X	X		X	X		X	X	
3. did you use the toilet other than using a bedpan	X	X		X	X		X	X		X	X		X	X	
4. did you get in and out of bed or a chair	X	X		X	X		X	X		X	X		X	X	
5. did you feed yourself	X	X		X	X		X	X		X	X		X	X	
<b>IV. IADLs</b>															
A. During the past two weeks, did you:															
1. prepare meals	X	X		X	X		X	X		X	X		X	X	



## Comparison of Questions Across Surveys

Survey Questions	Cholecystectomy			Elective Total Hip Replacement		
	2 weeks			4-6 months		
	Patient	Proxy		Patient	Proxy	
2. do housekeeping such as cleaning or laundry	X	X		X	X	X
3. shop for groceries and household necessities	X	X		X	X	X
4. take medication	X	X		X	X	X
5. make telephone calls to other people	X	X		X	X	X
<b>V. Post-Acute Care</b>						
A. During the past two weeks, did you receive any help with your personal care or household tasks from your family or friends?	X	X		X	X	X
B. Now I want to know about paid services you might have received during the past two weeks.						
1. Did you use a homemaker who provided help with housekeeping or personal care services?	X	X		X	X	X
2. Did a nurse visit your home, for example, a public health nurse or a nurse from some other organization?	X	X		X	X	X
3. Did you receive any physical therapy in your home or in an outpatient facility?						
4. Did you receive any other paid services?	X	X		X	X	X



## Comparison of Questions Across Surveys

[illegible]





## Comparison of Questions Across Surveys

Survey Questions	Cholecystectomy						Elective Total Hip Replacement					
	2 weeks		4-6 months		1 year		2 weeks		4-6 months		1 year	
	Patient	Proxy	Patient	Proxy	Patient	Proxy	Patient	Proxy	Patient	Proxy	Patient	Proxy
K. How long after you left the hospital did you resume your usual level of daily activities?	X	X	X	X					X	X	X	X
<b>VII. General Health</b>												
A. At the present time, would you say your health, in general, is:	X		X		X		X		X		X	
B. How tall are you in your stocking feet?	X	X					X	X				
C. How much did you weigh just prior to your surgery?	X	X					X	X				
D. Which of the following statements best describes your bladder control during the past two weeks?	X	X	X	X	X	X	X	X	X	X	X	X
<b>VIII. Mental Health</b>												
A. During the past two weeks, how much of the time have you been a very nervous person?	X		X		X		X		X		X	
B. During the past two weeks, how much of the time did you feel so down in the dumps that nothing could cheer you up?	X		X		X		X		X		X	
C. During the past two weeks, how much of the time did you feel calm and peaceful?	X		X		X		X		X		X	
D. During the past two weeks, how much of the time did you feel downhearted and blue?	X		X		X		X		X		X	
E. During the past two weeks, how much of the time were you a happy person?	X		X		X		X		X		X	



# Comparison of Questions Across Surveys

Survey Questions	Cholecystectomy			Elective Total Hip Replacement		
	2 weeks	4-6 months	1 year	2 weeks	4-6 months	1 year
	Patient	Proxy	Patient	Proxy	Patient	Proxy
<b>IX. Satisfaction</b>						
A. The care I received was as good as any I might have received anywhere.	X					
B. I was sent home from the hospital before I felt ready.	X					
C. If I had the whole thing to do over again, I would go to the same hospital.	X					
D. If I had to do the whole thing over again, I would choose the same doctors.						
E. There was enough discussion about whether I needed to have this operation.		X	X		X	X
F. In retrospect, this operation probably wasn't necessary.		X	X		X	X
G. The results of this operation were as good as I expected.		X	X		X	X
H. How successful was this operation in relieving your symptoms?		X	X		X	X
I. Prior to the operation, did you get a second opinion from another doctor about having the surgery?	X			X		
<b>X. Condition Specific--Total Hip Replacement</b>						
A. During the past two weeks, did you have hip-related pain while walking?	X			X	X	X
B. During the past two weeks, did you have hip-related pain while sitting?	X			X	X	X
C. During the past two weeks, did you have hip-related pain while climbing stairs?	X			X	X	X



# Comparison of Questions Across Surveys

Survey Questions	Cholecystectomy						Elective Total Hip Replacement					
	2 weeks		4-6 months		1 year		2 weeks		4-6 months		1 year	
	Patient	Proxy	Patient	Proxy	Patient	Proxy	Patient	Proxy	Patient	Proxy	Patient	Proxy
D. During the past two weeks, did you have hip-related pain while lying in bed at night?							X	X	X	X	X	X
E. During the past two weeks, did you have hip-related pain at any other time?							X	X	X	X	X	X
F. During the past two weeks, 1. did you have pain in your hip?							X		X		X	
2. did you have pain in your thigh?							X		X		X	
3. did you have pain in your buttocks?							X		X		X	
4. did you have pain in your knee?							X		X		X	
5. did you have pain in another area?							X		X		X	
G. During the past two weeks, did you have trouble putting on your shoes, socks or stockings?							X	X	X	X	X	X
H. Did you use an assistive device for putting on your shoes, socks or stockings?							X	X	X	X	X	X
I. During the past two weeks, did you leave the house to engage in activities other than visits to the doctor?							X	X	X	X	X	X
J. During the past two weeks, how much difficulty did you have getting in and out of a car?							X	X	X	X	X	X
K. During the past two weeks, how much difficulty did you have getting in or out of public transportation?							X	X	X	X	X	X
L. Surgical Complications 1. Since you left the hospital, have you had a bladder infection?									X	X		



# Comparison of Questions Across Surveys

Survey Questions	Cholecystectomy			Elective Total Hip Replacement		
	2 weeks	4-6 months	1 year	2 weeks	4-6 months	1 year
	Patient	Proxy	Patient	Proxy	Patient	Proxy
2. During the past two weeks, did you or do you have any paralysis or weakness of the foot or leg on the side where you had the hip replacement?						
<b>XI. Condition Specific--</b>						
<b>Cholecystectomy</b>						
A. Have you had any gallbladder related pain since you left the hospital?	X	X	X		X	X
B. Where was the pain located?	X		X			
C. What brought on the pain?	X	X	X			
D. What type of pain did you experience? Was it sharp?	X	X	X			
E. Was the pain you experienced cramping?		X				
F. Was the pain you experienced burning pain?	X	X	X			
G. Did you experience another type of pain?	X	X	X			
H. Overall, would you say the intensity of your pain was:	X	X	X			
I. How many months or years ago did you experience your first episode of pain?						
J. During the past two weeks have you experienced any of the following symptoms other than pain?						
1. nausea	X		X			
2. vomiting	X	X	X			
3. belching	X	X	X			
4. flatulence/gas	X	X	X			
5. certain foods that made you sick	X	X	X			
6. other	X	X	X			
K. What type of foods gave you pain or made you sick?	X	X	X			





Comparison of Questions Across Surveys

Survey Questions	Cholecystectomy			Elective Total Hip Replacement		
	2 weeks	4-6 months		2 weeks	4-6 months	
	Patient	Proxy		Patient	Proxy	
L. (Description of gallbladder pain)						
1. Have you had such pain since your surgery?	X		X			
2. Compared to the description just read to you, would you say your pain was:	X		X			
M. Was your surgery an emergency or was it scheduled before you went to the hospital?		X				
N. Are you limited in what you can eat since your surgery?			X	X		X







# Appendix F

## Summary of Survey Development

### Cholecystectomy

<u>SIGNIFICANT DECISION POINTS</u>	<u>Mar-91</u>	<u>Apr-91</u>	<u>Jun-91</u>	<u>Jul-91</u>	<u>Oct-91</u>
MAJOR CHANGES TO OVERALL SURVEYS	1st Draft	Refined content of questions and response categories	Changed from 2 data points to 3	Focused on length of survey and consistency issues <i>Proxy surveys developed</i>	Reworked skip patterns
<u>SPECIFIC ITEMS</u>					
I. Living Arrangements (PAC)(1)					
A. During the <u>two weeks prior to your hospital admission</u> , did you live in:	X	X	X	X	X
B. During the <u>two weeks prior to your hospital admission</u> , did you live alone?	X	X	X	X	X
C. Who else lived in the household?	X	X	X	X	X
D. I'd like to know the places you stayed since you left the hospital _____ weeks ago.	X	X	X	X	X
1. How many days did you stay there?	X	Dropped, not relevant to the analysis			
2. Did you move after that?	X	X	X	X	X
II. Condition Specific (CSP-generated)(2)					
A. Did you ever have any gallbladder-related pain before your surgery?	Originally "Did you have pain?"	Added "gall-bladder-related"	X	X	X
B. Where was the pain located?	X	X	Simplified wording of response categories	X	X
C. What brought on the pain?	X	X	X	X	X
D. What type of pain did you experience? Was it sharp?	X	X	X	X	X
E. Was the pain you experienced cramping?	X	X	X	X	X



# Summary of Survey Development

## Cholecystectomy

### SIGNIFICANT DECISION POINTS

	<u>Mar-91</u>	<u>Apr-91</u>	<u>Jun-91</u>	<u>Jul-91</u>	<u>Oct-91</u>
F. Was the pain you experienced burning pain?	Originally asked about burning and heartburn separately X	X	X	X	X
G. Did you experience another type of pain?	X	X	X	X	X
H. How often did you experience pain?	X	X	Added as a sub-question under each specific type of pain	X	X
I. How long did an episode of pain usually last?					Added for specificity under each specific type of pain
J. Was the pain steady or did it come and go?	X	X	Added as a sub-question under each specific type of pain	X	Reworded response categories for clarity X
K. Would you say the intensity of your pain was:	Originally asked "How would you rate your pain"	X	X	X	
L. How many months or years ago did you experience your first episode of pain?	Originally asked "How long have you experienced pain in general"	X	Wording changed for clarity	X	X





# Summary of Survey Development

## Cholecystectomy

<u>SIGNIFICANT DECISION POINTS</u>	<u>Mar-91</u>	<u>Apr-91</u>	<u>Jun-91</u>	<u>Jul-91</u>	<u>Oct-91</u>
M. Was the pain present at the time of your admission?	X	X	X	Dropped - answer not as important compared to length of survey	
1. How long was that particular episode?	X	X	X	Dropped - answer not as important compared to length of survey	
N. In the <u>two weeks prior to hospital admission</u> , had you experienced any of the following <u>symptoms</u> other than pain?					
1. nausea	X	X	X	X	X
2. heartburn	X	X	X	Dropped; hard to distinguish from F above (burning pain)	
3. vomiting	X	X	X	X	X
4. belching	X	X	X	X	X
5. flatulence/gas	X	X	X	X	X
6. certain foods that gave you pain or made you sick	Originally "food intolerance"	X	X	Wording changed for clarity, to be sure to distinguish from a food sensitivity or allergy and from the other symptoms listed	X
7. what types of food gave you pain or made you sick				Added for further clarification	X



# Summary of Survey Development

## Cholecystectomy

<u>SIGNIFICANT DECISION POINTS</u>	<u>Mar-91</u>	<u>Apr-91</u>	<u>Jun-91</u>	<u>Jul-91</u>	<u>Oct-91</u>
8. abdominal tenderness to touch	X	X	X	Dropped due to reliability concerns, too medical in nature, unclear how this differs from pain	
9. other					
O. How severe were the symptoms?	X	X	X	X	X
P. Which of the symptoms was the reason for your surgery?			Added as a sub-question under each specific symptom	X	X
Q. (Description of gallbladder pain)					
1. Did you have such pain prior to surgery?		X	X	X	X
2. Compared to the description just read to you, would you say your pain was:	X	X	X	X	X
R. Was your surgery an emergency or was it scheduled before you went to the hospital?	Originally worded: "Did you have time to decide about it?"	X	X	Wording changed for clarity	X
S. Prior to the operation, did you get a second opinion from another doctor about having the surgery?	X	X	X	X	X
1. What was the second opinion?					
T. Are you limited in what you can eat since your surgery?	X	X	X	X	Added for greater specificity X



# Summary of Survey Development

## Cholecystectomy

<u>SIGNIFICANT DECISION POINTS</u>	<u>Mar-91</u>	<u>Apr-91</u>	<u>Jun-91</u>	<u>Jul-91</u>	<u>Oct-91</u>
U. Did you use medication for pain?	X	X	Dropped due to respondent reliability concerns		
V. Was it doctor-prescribed or over the counter?	X	X	Dropped respondent reliability concerns		
W. Did you use medication to control your symptoms?	X	X	Dropped respondent reliability concerns		
X. Are you glad you had the surgery?	X	Dropped, too subjective			
Y. Did you expect the surgery to relieve all of the symptoms you had experienced?	X	Dropped, too subjective			
Z. Do you still have any pain that you attribute to your gallbladder?	X	Dropped, asked about specific pain			
AA. Did you ever experience any complications from your surgery?	X	X	X	Dropped-most complications occur in hospital or resolved in 4-6 months	
1. Had you anticipated these?	X	X	X	Dropped, most complications occur in hospital or resolved in 4-6 months	
BB. How successful was this operation in relieving your symptoms?	X	X	X	X	X



## Summary of Survey Development Cholecystectomy

<u>SIGNIFICANT DECISION POINTS</u>		<u>Mar-91</u>	<u>Apr-91</u>	<u>Jun-91</u>	<u>Jul-91</u>	<u>Oct-91</u>
III. Physical Activity						
A.	During the <u>two weeks prior to your hospital admission</u> , how often did you engage in vigorous physical activity (such as tennis, running, lifting heavy objects, bicycling, work-related, other)? Would you say:	Taken from SF-36(3)	X	X	X	Used to skip most activity, ADL and IADL questions
B.	During the <u>two weeks prior to your hospital admission</u> , how often did you engage in moderate physical activity (such as taking a walk, doing light housework or any other activity you consider moderate)?	Taken from SF-36 (original examples included moving a table, pushing a vacuum cleaner, bowling, or playing golf)	X	X	X	Examples changed to be more specific, age appropriate and not gender based
C.	During the <u>two weeks prior to your hospital admission</u> , did you walk:	Taken from SF-36 (originally said "Did your health limit your ability to walk" used three separate questions for distance)	X	X	X	Three questions combined into one with appropriate responses indicating distance walked
D.	During the <u>two weeks prior to your hospital admission</u> , did you have trouble climbing several flights of stairs?	Taken from SF-36 (originally said "Did your health limit your ability")	X	X	X	Wording changed to be consistent with hip questionnaire





# Summary of Survey Development

## Cholecystectomy

<u>SIGNIFICANT DECISION POINTS</u>	<u>Mar-91</u>	<u>Apr-91</u>	<u>Jun-91</u>	<u>Jul-91</u>	<u>Oct-91</u>
E. During the <u>two weeks prior to your hospital admission</u> , did you have trouble climbing one flight of stairs?	Taken from SF-36 (originally said "Did your health limit your ability")	X	X	X	Wording changed to be consistent with hip questionnaire
F. During the <u>two weeks prior to your hospital admission</u> , did you have trouble bending, kneeling or stooping.	Taken from SF-36 (originally said "Did your health limit your ability")	X	X	X	X
G. During the <u>two weeks prior to your hospital admission</u> , did you have trouble lifting or carrying groceries?	Taken from SF-36 (originally said "Did your health limit your ability")	X	X	X	Dropped due to length of survey; similar information found in other questions
H. How much of your usual activities are you now able to do? Would you say:	X	X	X	Dropped due to length of survey, similar information found in other questions	
I. Have you resumed your usual level of activities?				Added prior to J below for completeness	X
J. How long after you left the hospital did you resume your usual level of daily activities?	X	X	X	X	X
K. During the <u>past two weeks</u> , have you cut down on the amount of time you spend on work or other activities?	Taken from SF-36	Dropped due to length of survey - similar information found in other questions			



# Summary of Survey Development Cholecystectomy

<u>SIGNIFICANT DECISION POINTS</u>	<u>Mar-91</u>	<u>Apr-91</u>	<u>Jun-91</u>	<u>Jul-91</u>	<u>Oct-91</u>
L. During the <u>past two weeks</u> , how much <u>difficulty</u> did you have performing your usual activities (for example, it took extra effort)?	Taken from SF-36	X	X	X	X
M. During the <u>past two weeks</u> , how much were you limited in the kind of activities you did?	Taken from SF-36	X	X	Dropped due to length of survey - similar information found in other questions	
N. During the <u>past two weeks</u> , did you accomplish less than you wanted to in work or other activities?	Taken from SF-36	Changed wording to "How many of the activities were you able to accomplish?"	X	Dropped due to length of survey - similar information found in other questions	
IV. ADLs (Taken from PAC)					
A. During the <u>two weeks prior to your hospital admission</u> :					
1. did you bathe or shower other than taking a sponge bath	Also included a second similar question from SF-36	Dropped duplicate SF-36 question	X	X	X
2. did you dress yourself	X	X	X	X	X
3. did you use the toilet other than using a bedpan	X	X	X	X	X
4. did you get in and out of bed or a chair	X	X	X	X	X
5. did you feed yourself	X	X	X	X	X



# Summary of Survey Development Cholecystectomy

<u>SIGNIFICANT DECISION POINTS</u>	<u>Mar-91</u>	<u>Apr-91</u>	<u>Jun-91</u>	<u>Jul-91</u>	<u>Oct-91</u>
V. IADLs (Taken from PAC)					
A. During the <u>two weeks prior to your hospital admission</u> , did you:					
1. prepare meals	X	X	X	X	X
2. do housekeeping such as cleaning or laundry	X	X	X	X	X
3. shop for groceries and household necessities	X	X	X	X	X
4. take your medication	X	X	X	X	X
5. make telephone calls to other people	X	X	X	X	X
VI. General Health					
A. How tall are you in your stocking feet?				Added for base-line information	X
B. How much did you weigh <u>just prior to your surgery</u> ?				Added for base-line information	X
C. Compared to two months ago, would you say your health is?	X	Dropped, too similar to D			
D. <u>Prior to your hospitalization</u> would you say your health was:	Taken from SF-36 (response categories included a scale from excellent to poor)	X	X	X	X



# Summary of Survey Development

## Cholecystectomy

### SIGNIFICANT DECISION POINTS

Mar-91

Apr-91

Jun-91

Jul-91

Oct-91

E. Compared to just prior to your hospitalization, how would you rate your health in general now?

Taken from MOS(4) (response categories included a scale from much better now to much worse now)

Dropped, too similar to D

F. Compared to just prior to your hospitalization, are you more or less limited now in your everyday physical activities because of your health?

Taken from MOS

Dropped, similar information found in more specific questions elsewhere

G. Which of the following statements best describes your bladder control during the two weeks prior to your hospital admission?

Originally two separate questions about bladder control and catheter use

X

Reworded to become one question

X

X

### VII. Post-Acute Care (from PAC)

A. During the two weeks prior to your hospital admission, did you receive any help with your personal care or household tasks from your family or friends?

X

X

X

Response categories changed to be more specific indicating a total number of hours per week the respondent received assistance

X





# Summary of Survey Development Cholecystectomy

SIGNIFICANT DECISION POINTS	Mar-91	Apr-91	Jun-91	Jul-91	Oct-91
B. Now I want to know about services you might have received in the <u>two weeks prior to your hospital admission.</u>					
1. Did you use a homemaker who provided help with housekeeping or personal care services?	X	X	X	Response categories changed to be more specific indicating a total number of hours per week the respondent received assistance	X
2. Did a nurse visit your home, for example, a public health nurse or a nurse from some other organization?	X	X	X	Response categories changed to be more specific indicating a total number of hours per week the respondent received assistance	X
3. Did you receive any other paid services?	X	X	X	Response categories changed to be more specific indicating a total number of hours per week the respondent received assistance	X



# Summary of Survey Development Cholecystectomy

<u>SIGNIFICANT DECISION POINTS</u>	<u>Mar-91</u>	<u>Apr-91</u>	<u>Jun-91</u>	<u>Jul-91</u>	<u>Oct-91</u>
VIII. Cognitive (Taken from COG <sup>(5)</sup> )					
A. Cognitive Series	X	X	X	Dropped - difficult to get over the telephone	
B. Compared to people your own age, would you say your memory is excellent, good, fair, poor or very poor?	X	X	X	Dropped - difficult to get over the telephone	
C. Compared to people your own age, would you say your ability to figure things out such as making plans, doing repairs, or organizing your time is;	X	X	X	Dropped - difficult to get over the telephone	
IX. Mental Health					
A. How much time <u>during the two weeks prior to your hospital admission</u> did you feel full of energy?	Taken from SF-36	X	Dropped due to length of survey. Difficult to get answers over telephone		Return to original SF-36 for consistency
B. During the <u>two weeks prior to your hospital admission</u> how much of the time have you been a very nervous person?	Taken from SF-36	X	Dropped due to length of survey. Difficult to get answers over telephone	Put back in and reworded for better understanding	



# Summary of Survey Development

## Cholecystectomy

<u>SIGNIFICANT DECISION POINTS</u>	<u>Mar-91</u>	<u>Apr-91</u>	<u>Jun-91</u>	<u>Jul-91</u>	<u>Oct-91</u>
C. During the <u>two weeks prior to your hospital admission</u> , how much of the time have you felt so down in the dumps that nothing could cheer you up?	Taken from SF-36	X	X	Reworded for better understanding	Return to original SF-36 for consistency
D. How much time <u>during the two weeks prior to your hospital admission</u> have you felt calm and peaceful?	Taken from SF-36	X	X	Dropped due to length of survey, replaced by B	Added in again with original SF-36 wording for consistency and importance of category
E. How much time <u>during the two weeks prior to your hospital admission</u> have you felt downhearted and blue?	Taken from SF-36	X	Dropped due to length of survey Difficult to get answers over telephone		Added in again with original SF-36 wording for consistency and importance of category
F. During the <u>two weeks prior to your hospital admission</u> , how much of the time were you a happy person?	Taken from SF-36	X	Dropped due to length of survey Difficult to get over telephone		Added in again with original SF-36 wording for consistency and importance of category
G. Compared to <u>just prior to your hospital admission</u> , how often do you feel bothered by emotional problems such as feeling anxious, depressed or irritable now?	Taken from MOS	X	X	Dropped due to length of survey and difficulty of question	



# Summary of Survey Development

## Cholecystectomy

SIGNIFICANT DECISION POINTS	Mar-91	Apr-91	Jun-91	Jul-91	Oct-91
X. Satisfaction					
A. The care I received was as good as any I might have received anywhere.	X	X	X	X	X
B. I was sent home from the hospital before I felt ready.	X	X	X	X	X
C. If I had the whole thing to do over again, I would go to the same hospital.	X	X	X	X	X
D. If I had the whole thing to do over again, I would choose the same doctors.	X	X	X	X	X
E. There was <u>enough</u> discussion about whether I needed to have this operation.	Originally worded: "Not enough"	"Not enough" changed-"enough"	X	X	X
F. If I had the whole thing to do over again, I would choose to have this operation	X	Dropped due to length of survey and subjectivity of question			
G. In retrospect, this operation probably wasn't necessary	X	X	X	X	X
H. The results of this operation were as good as I expected.	X	X	X	X	X
XI. Demographics (from PAC)					
A. What is the highest level in school that you have completed?	X	X	X	X	X
B. What is your (and your spouse's) total yearly income from all sources? (Please include income from: wages, pensions, social security, savings and any other source).	Originally: "What is your present income?"	X	Expanded for completeness	Specifics in parents added for clarification	X





# Summary of Survey Development Cholecystectomy

SIGNIFICANT DECISION POINTS	Mar-91	Apr-91	Jun-91	Jul-91	Oct-91
C. Which category is closest to your total yearly income? (include spouse if living with spouse.) Please include income from: wages, pensions social security, savings and any other source.		Added if B above was refused	X	X	X
Abbreviations: 1. PAC: Post Acute Care Study, University of Minnesota 2. CSP: Condition Specific Panel 3. SF-36: Health Status Questionnaire, New England Medical Center 4. MOS: Medical Outcomes Study, New England Medical Center 5. COG: Telephone Assessment of Cognitive Function, University of Iowa					







# Summary of Survey Development

## Elective Total Hip Replacement

### SIGNIFICANT DECISION POINTS

Mar-91 Apr-91 Jun-91 Jul-91 Oct-91

E. During the <u>two weeks prior to your surgery</u> , did you have hip-related pain at any other time?					
F. How would you characterize your pain?	X	X	Changed to a separate question about severity for A-E & H1-6	X	X
G. Did you have pain during rest or activity during the <u>two weeks prior to your surgery</u> ?		X	X	Dropped, not specific enough	
H. During the two weeks prior to your surgery:					
1. Did you have pain in your hip?	Originally asked "Did you have pain and if so, where was the pain located?"	X	Changed to separate questions and added question about severity	X	X
2. Did you have pain in your thigh?	X	X	X	X	X
3. Did you have pain in your buttocks?	X	X	X	X	X
4. Did you have pain in your knee?	X	X	X	X	X
5. Did you have pain in your groin?	X	X	X	X	Dropped, too intrusive
6. Did you have pain in another area?	X	X	X	X	X
I. During the <u>two weeks prior to your surgery</u> , did you have trouble putting on your shoes, socks or stockings?	X	X	X	X	X
J. Did you use an assistive device for putting on your shoes, socks or stockings?	X	X	X	X	X
K. Do you have a special chair?	X	X	Dropped, not relevant to analysis		



# Summary of Survey Development

## Elective Total Hip Replacement

SIGNIFICANT DECISION POINTS      Mar-91      Apr-91      Jun-91      Jul-91      Oct-91

L. What type of chair do you prefer to sit in?

X

Dropped, not relevant to analysis

M. Did hip pain limit your sexual activity?

X

X

X

Dropped, too intrusive

N. Did you use medication for pain?

X

X

Dropped due to reliability concerns

O. Was it doctor-prescribed or over the counter?

X

X

Dropped due to reliability concerns

P. How often did you use the medication?

X

X

Dropped due to reliability concerns

Q. During the two weeks prior to your surgery, did you leave the house to engage in activities other than visits to the doctor?

Originally said "How often did you engage in social activities such as going to church, visiting, playing cards?" Taken from SF-36(3)

X

X

X

Re-worded less concerned with what they did and more with if they left the house

R. How often did your leave the house?

X

X

X

Dropped, frequency responses added to Q above





# Summary of Survey Development

## Elective Total Hip Replacement

### SIGNIFICANT DECISION POINTS

Mar-91

Apr-91

Jun-91

Jul-91

Oct-91

S. During the two weeks prior to your surgery, how much difficulty did you have getting in or out of a car?

Originally said:  
"Did you have any trouble getting into a car and did you drive a car?"

Changed to: "1) Did you have trouble getting into a car or using public transportation and 2) was it painful, etc. and 3) how often did you drive a car?"

Combined first two questions from previous survey into one and modified response categories

Simplified wording and added "Did you drive a car?"

Changed to final wording and added T

T. During the two weeks prior to your surgery, how much difficulty did you have getting in or out of public transportation?

U. Did you ever experience any complications from your surgery?

1. Had you anticipated these?

V. Prior to the operation, did you get a second opinion from another doctor about having the surgery?

W. Surgical Complications

1. Did the wound heal completely?

X

X

X

X

Dropped, redundant with more specific complication questions

X

X

X

Added to be consistent with chole survey

X

X

X

Dropped, required a judgment; should be resolved by second survey or obtained from Medicare data



# Summary of Survey Development

## Elective Total Hip Replacement

<u>SIGNIFICANT DECISION POINTS</u>	<u>Mar-91</u>	<u>Apr-91</u>	<u>Jun-91</u>	<u>Jul-91</u>	<u>Oct-91</u>
2. Was there any drainage from the wound?	X	X	X	Dropped, required a judgment; should be resolved by second survey or obtained from Medicare data	
3. Was there any swelling?	X	X	X	Dropped, required a judgment; should be resolved by second survey or obtained from Medicare data	
4. Where was the swelling?		X	X	Dropped, required a judgment; should be resolved by second survey or obtained from Medicare data	
5. Have you been tired, listless, lacking energy?	X	X	X	Dropped, required a judgment; should be resolved by second survey or obtained from Medicare data	
6. Was the pain more than you expected?	X	X	X	Dropped very subjective	



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SIGNIFICANT DECISION POINTS	Mar-91	Apr-91	Jun-91	Jul-91	Oct-91
7. Did you have diarrhea?	X	X	X	Dropped, required a judgment; should be resolved by second survey or obtained from Medicare data	X
8. Since you left the hospital, have you had a bladder infection?	X	X	X		
9. During the past two weeks, did you or do you have any paralysis or weakness of the foot or leg on the side where you had the hip replacement?	Originally said: "Did you have any paralysis or weakness in the operated foot or leg?"	X	X	X	Question re-worded for clarity
10. Does the leg on which you had surgery ever feel cold to the touch?	X	X	X	Dropped, required a judgment; should be resolved by second survey or obtained from Medicare data	
X. Have you taken antibiotics since discharge?	X	X	X	Dropped too specific for respondents	
Y. Have you taken blood thinners since discharge?	X	X	X	Dropped too specific for respondents	
Z. How successful was this operation in relieving your symptoms?	X	X	X	X	X



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<u>SIGNIFICANT DECISION POINTS</u>		<u>Mar-91</u>	<u>Apr-91</u>	<u>Jun-91</u>	<u>Jul-91</u>	<u>Oct-91</u>
AA.	Compared to before your surgery, how much hip pain do you generally have now?	X	X	X	Dropped; ask specifically about hip pain prior to and following surgery	
BB.	Compared to before your surgery, are you more or less limited now in your everyday physical activity?	X	X	X	Dropped; ask specifically about activity level prior to and following surgery	
CC.	Compared to how you felt before your surgery, how much difficulty do you have doing your daily activities both inside and outside your house because of your physical health now?	X	X	X	Dropped; ask specifically about activity level prior to and following surgery	
III. Physical Activity						
A.	During the <u>two weeks prior to your hospital admission</u> , how often did you engage in vigorous physical activity (such as tennis, running, lifting heavy objects, bicycling, work-related, other)? Would you say:	Taken from SF-36(2)	X	X	X	Used to skip most activity, ADL and IADL questions
B.	During the <u>two weeks prior to your hospital admission</u> , how often did you engage in moderate physical activity (such as taking a walk, doing light housework or any other activity you consider moderate)?	Taken from SF-36 (original examples included moving a table, pushing a vacuum cleaner, bowling, or playing golf)	Dropped; felt that specific physical activity questions were more important		Added to be consistent with chole surveys	Examples changed to be more specific and not gender based





# Summary of Survey Development

## Elective Total Hip Replacement

SIGNIFICANT DECISION POINTS	Mar-91	Apr-91	Jun-91	Jul-91	Oct-91
C. During the <u>two weeks prior to your hospital admission</u> , did you walk:	Originally said "How far could you walk before your surgery?"	X	X	Changed to be consistent with wording in chole	X
D. During the <u>two weeks prior to your surgery</u> did you use any assistive device when walking?	CSP generated	X	X	X	X
E. What was your usual type of assistance? Was it:	CSP generated	X	X	X	X
F. Did you have trouble walking because of hip pain <u>two weeks before your surgery</u>	CSP generated	X	X	Dropped, redundant	
G. During the <u>two weeks prior to your hospital admission</u> , did you have trouble climbing several flights of stairs?	Originally asked: "Did you have trouble climbing stairs before your surgery?" CSP generated	X	X	Changed wording to be consistent with chole surveys	X
H. During the <u>two weeks prior to your hospital admission</u> , did you have trouble climbing one flight of stairs?					Added to be consistent with chole surveys
I. How did you climb the stairs?	X	X	X	Dropped; not relevant to analysis	
J. During the <u>two weeks prior to your hospital admission</u> , did you have trouble bending, kneeling or stooping.	Taken from SF-36 (originally said "Did your health limit your ability")			Added to be consistent with chole surveys	X



# Summary of Survey Development

## Elective Total Hip Replacement

Oct-91

Jul-91

Jun-91

Apr-91

Mar-91

### SIGNIFICANT DECISION POINTS

K. During the <u>two weeks prior to your hospital admission</u> , did you have trouble lifting or carrying groceries?	Taken from SF-36 (originally said "Did your health limit your ability")	X	Dropped due to length of survey; similar information found in other questions	X	
L. How much of your usual activities are you now able to do? Would you say:	X				Dropped; similar information in P
M. Have you resumed your usual level of activities?					
N. How long after you left the hospital did you resume your usual level of daily activities?	X		X		
O. During the <u>past two weeks</u> , have you cut down on the amount of time you spend on work or other activities?	Taken from SF-36		Dropped due to survey length	X	Added to N for completeness X
P. During the <u>past two weeks</u> , how much <u>difficulty</u> did you have performing your usual activities (for example, it took extra effort)?	Taken from SF-36		Dropped due to survey length		Added to replace L and to be consistent with chole survey X
Q. During the <u>past two weeks</u> , how much were you limited in the kind of activities you did?	Taken from SF-36		Dropped due to survey length		
R. During the <u>past two weeks</u> , did you accomplish less than you wanted to in work or other activities?	Taken from SF-36		Dropped due to survey length		
IV. ADLs (Taken from PAC)					
A. During the <u>two weeks prior to your hospital admission</u> :					
1. did you bathe or shower other than taking a sponge bath	Also included similar question from SF-36	X	Dropped duplicate SF-36 question	X	X
2. did you dress yourself	X	X	X	X	X



# Summary of Survey Development

## Elective Total Hip Replacement

SIGNIFICANT DECISION POINTS	Mar-91	Apr-91	Jun-91	Jul-91	Oct-91
3. did you use the toilet other than using a bedpan	X	X	X	X	X
4. did you get in and out of bed or a chair	X	X	X	X	X
5. did you feed yourself	X	X	X	X	X
V. IADLs (Taken from PAC)					
A. During the <u>two weeks prior to your hospital admission</u> , did you:					
1. prepare meals	X	X	X	X	X
2. do housekeeping such as cleaning or laundry	X	X	X	X	X
3. shop for groceries and household necessities	X	X	X	X	X
4. take your medication	X	X	X	X	X
5. make telephone calls to other people	X	X	X	X	X
VI. General Health					
A. How tall are you in your stocking feet?			Added for base-line information	X	X
B. How much did you weigh <u>just prior to your surgery</u> ?			Added for base-line information	X	X
C. Compared to two months ago, would you say your health is?	X	Dropped, too similar to D			
D. <u>Prior to your hospitalization</u> would you say your health was:	Taken from SF-36 (response categories included a scale from excellent to poor)	X	X	X	X



# Summary of Survey Development

## Elective Total Hip Replacement

Oct-91

Jul-91

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Mar-91

### SIGNIFICANT DECISION POINTS

E. Compared to <u>just prior to your hospitalization</u> , how would you rate your health in general now?	Taken from MOS(4) (response categories included a scale from much better now to much worse now)	Dropped, too similar to D		
F. Compared to <u>just prior to your hospitalization</u> , are you more or less limited now in your everyday physical activities because of your health?	Taken from MOS	Dropped, similar information found in more specific questions elsewhere		
G. Which of the following statements best describes your bladder control during the <u>two weeks prior to your hospital admission</u> ?	Originally two separate questions about bladder and catheter use	X	Reworded to shorten length of question	X
VII. Post-Acute Care (from PAC)				
A. During the <u>two weeks prior to your hospital admission</u> , did you receive any help with your personal care or household tasks from your family or friends?	X	X	X	X
B. Now I want to know about services you might have received in the <u>two weeks prior to your hospital admission</u> .				
1. Did you use a homemaker who provided help with housekeeping or personal care services?	X	X	X	X





# Summary of Survey Development

## Elective Total Hip Replacement

<u>SIGNIFICANT DECISION POINTS</u>	<u>Mar-91</u>	<u>Apr-91</u>	<u>Jun-91</u>	<u>Jul-91</u>	<u>Oct-91</u>
2. Did a nurse visit your home, for example, a public health nurse or a nurse from some other organization?	X	X	X	Response categories changed to be more specific	X
3. Did you receive any physical therapy in your home or an outpatient facility?	Originally two separate questions	X	X	Two questions combined into one	X
4. Did you receive any other paid services?	X	X	X	Response categories changed to be more specific	X
VIII. Cognitive (Taken from COG)(5)					
A. Cognitive Series	X	X	X	Dropped - difficult to get information over the telephone	
B. Compared to people your own age, would you say your memory is excellent, good, fair, poor or very poor?	X	X	X	Dropped - difficult to get information over the telephone	
C. Compared to people your own age, would you say your ability to figure things out such as making plans, doing repairs, or organizing your time is:	X	X	X	Dropped - difficult to get information over the telephone	
IX. Mental Health					
A. How much time <u>during the two weeks prior to your hospital admission</u> did you feel full of energy?	Taken from SF-36	X		Dropped due to length of survey. Difficult to get answers to these questions over telephone	



# Summary of Survey Development

## Elective Total Hip Replacement

SIGNIFICANT DECISION POINTS      Mar-91      Apr-91      Jun-91      Jul-91      Oct-91

B.	During the <u>two weeks prior to your hospital admission</u> how much of the time have you been a very nervous person?	Taken from SF-36	X	Dropped due to length of survey. Difficult to get answers to these questions over telephone	Put back in and reworded for better understanding	Return to original SF-36 for consistency
C.	During the <u>two weeks prior to your hospital admission</u> how much of the time have you felt so down in the dumps that nothing could cheer you up?	Taken from SF-36	X		Reworded for better understanding	Return to original SF-36 for consistency
D.	How much time <u>during the two weeks prior to your hospital admission</u> have you felt calm and peaceful?	Taken from SF-36	X		Dropped due to length of survey, replaced by B	Added in again with original SF-36 wording for consistency and importance of category
E.	How much time <u>during the two weeks prior to your hospital admission</u> have you felt downhearted and blue?	Taken from SF-36	X	Dropped due to length of survey. Difficult to get answers to these questions over telephone		Added in again with original SF-36 wording for consistency and importance of category
F.	During the <u>two weeks prior to your hospital admission</u> , how much of the time were you a happy person?	Taken from SF-36	X	Dropped due to length of survey. Difficult to get answers to these questions over telephone		Added in again with original SF-36 wording for consistency and importance of category



# Summary of Survey Development

## Elective Total Hip Replacement

Oct-91

Jul-91

Jun-91

Apr-91

Mar-91

### SIGNIFICANT DECISION POINTS

	Taken from MOS	X	X	Dropped due to length of survey and difficulty of question	
G. Compared to <u>just prior to your hospital admission</u> , how often do you feel bothered by emotional problems such as feeling anxious, depressed or irritable now?					
X. Satisfaction					
A. The care I received was as good as any I might have received anywhere.	X	X	X	X	X
B. I was sent home from the hospital before I felt ready.	X	X	X	X	X
C. If I had the whole thing to do over again, I would go to the same hospital.	X	X	X	X	X
D. If I had the whole thing to do over again, I would choose the same doctors.	X	X	X	X	X
E. There was <u>enough</u> discussion about whether I needed to have this operation.	Originally worded: "Not enough"	"Not enough" changed to "enough"	X	X	X
F. If I had the whole thing to do over again, I would choose to have this operation.	X	Dropped due to length of survey and subjectivity of question			
G. In retrospect, this operation probably wasn't necessary	X	X	X	X	X
H. The results of this operation were as good as I expected.	X	X	X	X	X
XI. Demographics (from PAC)					
A. What is the highest level in school that you have completed?	X	X	X	X	X



# Summary of Survey Development

## Elective Total Hip Replacement

SIGNIFICANT DECISION POINTS      Mar-91      Apr-91      Jun-91      Jul-91      Oct-91

B. What is your (and your spouse's) total yearly income from all sources? (Please include income from: wages, pensions, social security, savings and any other source).	Originally: "What is your present income?"	X	Expanded for completeness	Specifics in parentheses added for clarification	X
C. Which category is closest to your total yearly income? (include spouse if living with spouse.) Please include income from: wages, pensions social security, savings and any other source.	Added if B was refused	X	X	X	X

### Abbreviations:

1. PAC: Post Acute Care Study, University of Minnesota
2. CSP: Condition Specific Panel
3. SF-36: Health Status Questionnaire, New England Medical Center
4. MOS: Medical Outcomes Study, New England Medical Center
5. COG: Telephone Assessment of Cognitive Function, University of Iowa









## Appendix G

### Chart Abstraction -- Cholecystectomy

<u>INFO ITEM</u>	<u>SOURCE</u>	<u>PARAMETERS</u>
I. Preoperative factors		
A. Age	1) Administrative records 2) Admission H&P	1) Record patient age in years
B. Gender	1) Administrative records	1) Male or female
C. Race	1) Administrative records 2) Admission H&P	1) White, black or other
D. Marital status	1) Administrative admission forms	1) Record status
E. Obesity	1) Admission H&P 2) Admission vital signs/bedside flow sheet	1) Record patient height and weight
F. Socioeconomic status (unlikely to be in chart)	3) Initial nursing assessment 1) Admission H&P	1) Level of education & income 2) Medicaid status
G. Elective vs emergent hospitalization	1) Admission H&P 2) ER note (if present) 3) Initial nursing assessment 4) Admission forms 1) Admission H&P 2) Preoperative progress notes	1) Documentation of scheduled admission for cholecystectomy vs evidence of emergent/unscheduled hospital admission
H. Preoperative second opinion		
I. Preoperative diagnostic tests		
1. Ultrasound of gall bladder	1) Radiology reports 2) Admission H&P 3) Preoperative progress notes	1) Presence of gallstones in gallbladder 2) Presence of common bile duct stone 3) Dilatation of common bile duct/biliary system 4) Perforation of gallbladder 5) Evidence of gallbladder necrosis 6) Intravesicular echoes (sludge) 1) Non-visualization of gallbladder A. Single vs double dose of radiopaque dye tablets 2) Stones 1) Non-visualization of the gallbladder & passage of dye to duodenum
2. Oral cholecystogram	1) Radiology reports 2) Admission H&P 3) Preoperative progress notes	
3. Radionuclide scans	1) Radiology reports 2) Admission H&P 3) Preoperative progress notes	
a. HIDA		
b. PIPIDA		
c. DISIDA		
4. ERCP		
J. Preoperative length of stay	1) Administrative records 2) Operative report	1) Record in days



# Chart Abstraction -- Cholecystectomy

## INFO ITEM

## SOURCE

## PARAMETERS

K. Mitigating Factors			
1. Heart disease	1) Admission H&P 2) Initial nursing assessment 3) Pre-op progress notes/consultations	1) History of ASHD, angina, or congestive heart failure 2) Previous MI 3) EKG or stress test interpretation 1) History of DM 2) Order for insulin or oral hypoglycemic agents	Yes or No
2. History of diabetes mellitus	1) Admission H&P 2) Initial nursing assessment 3) Pre-op progress notes/consultations		Yes or No
3. Pulmonary disease	1) Admission H&P 2) Initial nursing assessment 3) Pre-op progress notes/consultations	1) History of COPD 2) History of asthma 3) History of other chronic lung disease 4) Baseline PFT, ABG, x-ray 1) History of stroke (CVA), Parkinson's disease, or dementia 2) Mental status questionnaire	Yes or No Yes or No Yes or No
4. Neurologic disease	1) Admission H&P 2) Initial nursing assessment 3) Pre-op progress notes/consultations		Yes or No
5. History of deep venous thrombosis or pulmonary embolism	1) Admission H&P 2) Initial nursing assessment 3) Pre-op progress notes/consultations	1) History of DVT or PE	Yes or No
6. Active depression	1) Admission H&P 2) Pre-op progress notes/consultations	1) Presence or absence of active clinical depression	Yes or No
7. Severe peripheral vascular disease	1) Admission H&P 2) Initial nursing assessment 3) Pre-op progress notes/consultations	1) History of severe peripheral vascular disease 2) History of peripheral vascular surgery 3) Physical or symptomatic evidence of PVD: A. Bruits or arterial insufficiency on exam) B. Active claudication by history 1) Chronic renal failure or dialysis (hemodialysis or peritoneal dialysis)	
8. Renal failure	1) Admission H&P 2) Initial nursing assessment 3) Pre-op progress notes/consultations		
9. Liver disease	1) Admission H&P 2) Initial nursing assessment 3) Pre-op progress notes/consultations	1) History of viral hepatitis, alcoholic hepatitis, cirrhosis or other liver disease	
10. Hepatic encephalopathy	1) Admission H&P 2) Pre-op progress notes/consultations 3) Lab results	1) Presence or absence 2) Highest serum ammonia level (if obtained) 3) Asterix on physical exam; presence/absence; normal renal function	





# Chart Abstraction -- Cholecystectomy

INFO ITEM	SOURCE	PARAMETERS
11. Ascites	1) Admission H&P 2) Pre-op progress notes/consultations 3) Preop ultrasound	1) Presence or absence by physical exam 2) Presence or absence by ultrasound
12. Immunosuppressed	1) Admission H&P 2) Pre-op progress notes/consultations	1) Use of corticosteroids for at least six weeks prior to surgery 2) Chronic use of other immuno suppressants
13. Pancreatitis	3) Admission meds 1) Admission H&P 2) Pre-op progress notes/consultations	1) Presence or absence of clinical diagnosis of pancreatitis preop 2) Preop elevation of serum amylase or lipase (if obtained)
14. Sickle cell anemia	3) Lab results (preop) 1) Admission H&P 2) Initial nursing assessment 3) Pre-op progress notes/consultations	1) Presence or absence of diagnosis of sickle cell anemia
15. Seriological parameters a. Total bilirubin b. Direct bilirubin c. Prothrombin time d. Albumin e. SGOT (AST) f. SGPT (ALT) g. Alkaline phosphatase L. ASA risk category	1) Lab results 1) Lab results 1) Lab results 1) Lab results 1) Lab results 1) Lab results 1) Lab results 1) Anesthesia records 2) Preop anesthesia note	1) % of high normal of normal range 1) % of high normal of normal range 1) % of high normal of normal range 1) % of high normal of normal range 1) % of high normal of normal range 1) % of high normal of normal range 1) % of high normal of normal range 1) Record category
II. Operative factors A. Age of primary surgeon B. Perforation of gallbladder C. Gangrene of the gallbladder D. Incidental appendectomy E. Cholesterosis, cholesterol polyps, adenomatosis of gallbladder on path report F. Gallstones G. Gallbladder cancer H. Operative time I. Common bile duct stones	1) Operative note 1) Operative note 2) Pathology report 1) Operative note 2) Pathology report 1) Operative note 2) Pathology report 1) Pathology report  1) Pathology report  1) Pathology report 1) Surgical report 2) Anesthesia record 1) Operative report	1) Record name of surgeon 1) Presence or absence of gallbladder perforation (exclude surgical laceration?) 1) Presence or absence  1) Presence or absence (path report vs normal appendix) 1) Presence or absence of each  1) Presence or absence 2) Number and size 1) Presence or absence 1) Record time 2) Anesthesia time 1) Presence or absence





# Chart Abstraction -- Cholecystectomy

INFO ITEM	SOURCE	PARAMETERS
J. Operative cholangiogram	1) Operative report	1) Done or not done
K. Common bile duct exploration	1) Operative report	1) Presence or absence
L. Intraoperative ERCP	1) Operative report	1) Presence or absence
M. Laparoscopic cholecystectomy	1) Operative report	1) Presence or absence
1. Cautery: laser cautery, electrocautery, or both	1) Operative report	1) Record type of canterly
2. Conversion to incisional cholecystectomy	1) Operative report	1) Presence or absence
N. Injury to common bile duct	1) Operative report	1) Presence or absence
O. Blood loss	1) Transfusion records	1) Record number of units of RBC's transfused
P. Bile leakage	1) Operative report	2) Use of device
Q. Perioperative antibiotic therapy	1) Order sheets	1) Presence or absence
	2) Med administration records	1) Presence or absence
	3) Operative reports	2) Timing:
		A. Intermediate preop (# doses)
		B. Intraop
		C. Postop (# doses)
		D. Other
III. Postoperative factors		
A. Care related		
1. Use of surgical drains	1) Operative report	1) Presence or absence
	2) Post-op progress notes	2) Type (T-tube, rubber, penrose, closed suction, or other)
2. Pre-operative length of stay	1) Administrative records	1) Record in days
3. Post operative length of stay	1) Operative report	1) Record in days
	2) Administrative records	
4. Postoperative days in bed	1) Progress notes, nurses and/or physicians	1) Record post-op day that patient gets out of bed
	2) Order sheets	
5. Prophylaxis for deep venous thrombosis	1) Order sheets	1) Record as type, post-op day
	2) Progress notes	A. Heparin
		B. Warfarin
		C. Aspirin
		D. Venodynes
		E. Thromboguards
		F. Stockings
		G. Record highest post-op PT
6. Respiratory prophylaxis	1) Order sheets	1) Record type
	2) Progress notes	
7. Post-op endoscopic retrograde cholangiopancreatography		



# Chart Abstraction -- Cholecystectomy

## INFO ITEM

## SOURCE

## PARAMETERS

B. Outcomes		
1. Urinary retention	1) Progress notes 2) Order sheets	1) Indication of reduced urinary output or post-void residual urine >20 cc in progress notes 2) Reinsertion of urinary catheter post-op 3) Physician order for Foley catheter 4) Record highest post-op PTT
2. Wound infection	1) Post-op progress notes 2) Post-op nursing notes	1) Indication of wound infection in progress notes (erythema, purulent drainage, necrotic margins)
3. Wound dehiscence	1) Post-op progress notes 2) Post-op nursing notes	1) Indication in notes of inadequate wound healing or wound breakdown
4. Post-op pneumonia	1) Post-op progress notes 2) Post-op chest x-ray	1) Indication of post-op pneumonia by CXR and clinical diagnosis (exclude atelectasis)
5. Retained common bile duct stones	1) Post-op progress notes 2) Post-op ultrasound results 3) Post-op ERCP results 4) Return to OR for CBD stone	1) Progress notes, post-op ultrasound, post-op ERCP or 2nd operation indicating retained CBD stone
6. Post-op pancreatitis	1) Lab results 2) Post-op progress notes	1) Presence or absence of clinical diagnosis 2) Highest post-op amylase and lipase
7. Post-op deep venous thrombosis or pulmonary embolism	1) Post-op progress notes/consults 2) Radiology reports 3) Ultrasound reports 4) Plethmography reports	1) Clinical diagnosis 2) Venogram, ultrasound, or plethmography indicating venous thrombosis
8. Post-op ileus/intestinal obstruction	1) Post-op progress notes 2) Post-op abdominal x-ray results 3) Return to OR for intestinal obstruction 4) Order sheets 5) Post-op nursing notes	1) Days post-op to resume pre-op diet 2) Post-op abdominal x-ray c/w obstruction 3) 2nd operation because of intestinal obstruction
9. Biliary obstruction	1) Post-op progress notes 2) Post-op ultrasound 3) Return to OR for intestinal obstruction 4) Post-op ERCP	1) Diagnosis by ERCP or ultrasound 2) 2nd operation because of intestinal obstruction
10. Bile leak	1) Post-op progress notes 2) Return to OR for bile leak	1) 2nd operation to repair bile leak
11. Gall Bladder laceration	1) Post-op progress notes 2) Return to OR for bile leak	1) 2nd operation to repair laceration
12. Other return to OR	1) Progress notes 2) 2nd operative report	1) Record indication/findings: A. Bleeding, biliary obstruction, bile leak, intestinal obstruction, common bile duct injury, other)



# Chart Abstraction -- Cholecystectomy

## PARAMETERS

## SOURCE

## INFO ITEM

13. Status at Discharge*			
a. Instability			
1. Fever	TPR sheets	1) > 38.3° C	
2. New incontinence	1) Nursing notes	1) Yes or No	
3. New chest pain	1) Nursing notes	1) Yes or No	
4. New shortness of breath	1) Nursing notes	1) Yes or No	
5. New confusion	1) Nursing notes	1) Yes or No	
6. New heart rate	1) TPR sheets & nursing notes	1) > 130 beats/min	
7. New respiratory rate	1) TPR sheets & nursing notes	1) > 30/min	
8. Diastolic blood pressure	1) TPR sheets & nursing notes	1) > 105mm Hg	
9. New systolic blood pressure	1) TPR sheets & nursing notes	1) < 90mm Hg	
10. New low heart rate	1) TPR sheets & nursing notes	1) < 50 beats/min	
11. New premature ventricular contractions	1) Nursing/physician notes	1) Yes or No	
b. Sickness			
1. Fever	TPR sheets	1) > 38.3° C	
2. New incontinence	1) Nursing notes	1) Yes or No	
3. Chest pain	1) Nursing notes	1) Yes or No	
4. Shortness of breath	1) Nursing notes	1) Yes or No	
5. Confusion	1) Nursing notes	1) Yes or No	
6. Heart rate	1) TPR sheets & nursing notes	1) > 130 beats/min	
7. Respiratory rate	1) TPR sheets & nursing notes	1) > 30/min	
8. Diastolic blood pressure	1) TPR sheets & nursing notes	1) > 105mm Hg	
9. Systolic blood pressure	1) TPR sheets & nursing notes	1) < 90mm Hg	
10. New decubitus	1) Nursing notes	1) Yes or No	
11. Low heart rate	1) TPR sheets & nursing notes	1) < 50 beats/min	
12. Premature ventricular contraction	1) TPR sheets & nursing notes	1) Yes or No	
13. Parenteral antibiotics	1) IV notes	1) Yes or No	
c. Abnormal last lab values			
1. Potassium	1) Laboratory sheets	1) Yes or No	
2. Sodium	1) Laboratory sheets	1) Yes or No	
3. Renal distress	1) Laboratory sheets	1) Yes or No	
4. Low hematocrit	1) Laboratory sheets	1) Yes or No	
5. High WBC	1) Laboratory sheets	1) Yes or No	
6. Weight increase	1) TPR sheets & nursing notes	1) > 1.35 kg	
7. CHF by roentgenographic worsening	1) X-ray sheets, physician notes	1) Yes or No	
14. Sepsis	1) Progress notes	1) Clinical diagnosis in progress notes and positive blood culture results post-op	
15. Death	2) Microbiology results	1) Intra-op or post-op	
	1) Administrative records	2) If post-op, number of days	





# Chart Abstraction -- Cholecystectomy

<u>INFO ITEM</u>	<u>SOURCE</u>	<u>PARAMETERS</u>
16. Readmission within 30 days	1) Administrative records	1) Diagnosis
17. Altered mental status	1) Post-op progress notes physician and/or nurses	1) Indication in progress notes of new or worsened confusion, agitation, or disorientation post-op
18. Adverse drug reaction	1) Post-op progress notes physician and/or nurses	1) Indication in progress notes of adverse drug reaction 2) Type A. Rash B. Altered vital signs C. Altered serology D. Decline in renal function (rise in serum creatinine) E. Other
19. Transfusion reaction	1) Transfusion record	1) Indication on transfusion record of transfusion reaction
20. Discharge destination	1) Discharge summary	1) Specific location
21. Functional status at discharge	1) Discharge summary 2) Discharge planning note	

\*Kosecoff J, K Kahn, et al.. Prospective Payment System and Impairment at Discharge. JAMA; 264:1980-1983, 1990.





# Chart Abstraction -- Elective Total Hip Replacement

## INFO ITEM

## SOURCE

## PARAMETERS

### I. Preoperative Factors

- A. Age/birthdate
- B. Gender
- C. Race

- D. Marital status
- E. Obesity

### F. Socioeconomic status (unlikely to be in chart)

### G. Mitigating factors

1. Prior hip surgery of affected joint
2. Other joint involvement

### 3. Heart disease

### 4. History of diabetes mellitus

### 5. Pulmonary disease

### 6. Neurologic disease

### 7. History of deep venous thrombosis or pulmonary embolism

- 1) Administrative records
- 1) Administrative records
- 1) Administrative records
- 2) Admission H&P
- 1) Administrative records
- 1) Admission H&P
- 2) Admission vital signs/bedside flow sheet

- 1) Admission H&P

- 1) Admission H&P
- 2) Operative note
- 1) Admission H&P
- 2) Pre-op progress notes/consultations

- 1) Admission H&P
- 2) Initial nursing assessment
- 3) Pre-op progress notes/consultations
- 4) Anesthesiologist note

- 1) Admission H&P
- 2) Initial nursing assessment
- 3) Pre-op progress notes/consultations

- 4) Anesthesiologist note

- 1) Admission H&P
- 2) Initial nursing assessment
- 3) Pre-op progress notes/consultations

- 4) Anesthesiologist note

- 1) Admission H&P
- 2) Initial nursing assessment
- 3) Pre-op progress notes/consultations

- 1) Admission H&P
- 2) Initial nursing assessment
- 3) Pre-op progress notes/consultations

- 1) Record in years
- 1) Male or female
- 1) White, black or other
- 1) Record status
- 1) Record patient height and weight/specific notation
- 2) Anesthesiologist may record

- 1) Level of education & income
- 2) Medicaid status

- 1) Presence or absence
- 2) Date of operation
- 1) Presence of absence of symptoms in opposite hip, back, or either knee

- 1) History of ASHD, angina, or congestive heart failure
- 2) Previous MI
- 3) EKG or stress test interpretation (arrhythmia, Q waves)
- 4) History of hypertension

- 1) History of DM
- 2) Order for insulin or oral hypoglycemic agents
- 3) Diabetic diet

- 1) History of COPD

- 2) History of asthma

- 3) History of other chronic lung disease

- 4) Baseline PFT, ABG, x-ray

- 5) History of smoking

- 1) History of stroke (CVA), Parkinson's disease, or dementia

- 2) Mental status questionnaire

- 1) History of DVT or PE

Yes or No

Yes or No

Yes or No

Yes or No

Yes or No

Yes or No

Yes or No



# Chart Abstraction -- Elective Total Hip Replacement

INFO ITEM	SOURCE	PARAMETERS	Yes or No
8. Active depression	1) Admission H&P 2) Pre-op progress notes/consultations	1) Presence or absence of active clinical depression	
9. Severe peripheral vascular disease	1) Admission H&P 2) Initial nursing assessment 3) Pre-op progress notes/consultations	1) History of severe PVD 2) Physical or symptomatic evidence of PVD: A) Bruits or arterial insufficiency on exam B) Active claudication by history	
10. Renal failure	1) Admission H&P 2) Initial nursing assessment 3) Pre-op progress notes/consultations	3) History of peripheral vascular surgery 1) Chronic renal failure or dialysis (hemodialysis or peritoneal dialysis) 2) Preoperative: creatinine BUN	
11. Liver disease	1) Admission H&P 2) Initial nursing assessment 3) Pre-op progress notes/consultations	1) History of viral hepatitis, alcoholic hepatitis, cirrhosis or other liver disease 2) Preoperative: SGOT, SGPT, alkphos, bilirubin	
H. Preoperative length of stay	1) Administrative records 2) Operative note	1) Record in days	
I. Hip infection	1) Admission H&P 2) Pre-op progress notes/consultations	1) Presence or absence of bacterial hip infection within one month	
J. Immunosuppressed	1) Admission H&P 2) Pre-op progress notes/consultations	1) Use of corticosteroids for at least six weeks prior to surgery 2) Chronic use of other immuno suppressants	
K. ASA Risk Category	3) Admission meds 1) Anesthesia records 2) Preoperative anesthesia notes	1) Record category	
L. Medications on admission	1) Medication records	1) List all	
M. Chest x-ray report	1) Radiologist report	1) Cardiomyopathy 2) CHF	
N. Laboratory results	1) Lab results	1) Anemia (% of high normal of normal range) 2) Renal status (% of high normal of normal range) 3) Liver (% of high normal of normal range) 4) Hemoglobin (% of high normal of normal range) 5) Urine infection (more than 5 WBCs) (% of high normal of normal range)	
II. Operative Factors			
A. Prosthesis type	1) Operative note	1) Record separately for cup and stem 2) Name and serial number	
B. Surgical approach	1) Operative note	1) Anterior, posterior, lateral, or other	



# Chart Abstraction -- Elective Total Hip Replacement

INFO ITEM	SOURCE	PARAMETERS
C. Operative time	1) Operative note	1) Record time
D. Blood loss	2) Anesthesia records	2) Anesthesia time
E. Prosthetic glue/cement	1) Transfusion records	1) Record number of units of RBC's transfused
F. Intraoperative complications	1) Operative note	2) Use of device
	1) Operative note	1) Presence or absence
		1) Fractures
		2) Instability of prosthesis
		3) Wiring
		4) Bone graft or screws
G. Perioperative antibiotic therapy	1) Order sheets	1) Presence or absence
	2) Med administration records	2) Timing:
	3) Operative report	A. Immediate pre-op (# doses)
		B. Intra op
		C. Post-op (# doses)
		D. Other
H. Anesthesia type	1) Operative report	1) Record
	2) Anesthesia record	A. General
		B. Spinal
		C. Other
III. Postoperative Factors		
A. Care related		
1. Prophylaxis for deep venous thrombosis	1) Order sheets	1) Record as type
	2) Progress notes	A. Heparin
		B. Warfarin
		C. Aspirin
		D. Venodynes
		D. Venodynes
		E. Thromboguards
		F. Stockings
		2) Record highest post-op PT
		3) Record highest post-op PTT
		1) Record type
2. Respiratory prophylaxis	1) Order sheets	1) Record post-op day that patient gets out of bed
	2) Progress notes	
3. Post-operative days in bed	1) Progress notes nurses and/or physicians	
	2) Order sheets	
4. Post-operative full weight bearing	1) Post-op progress notes:	1) Record post-op day that patient attained full weight bearing of affected hip
	A. Nurses	
	B. Physicians	
	C. PT	





# Chart Abstraction -- Elective Total Hip Replacement

INFO ITEM	SOURCE	PARAMETERS
5. Utilization of specialized support services	1) Progress notes	1) Presence or absence: A. PT B. OT C. Social work
6. Analgesia	1) Order sheet 2) Anesthesia consult	1) Amount 2) Type 3) Availability of parental controlled analgesia
B. Outcomes		
1. Urinary retention	1) Progress notes 2) Order sheets	1) No voiding 12 hours after surgery or post-void residual urine >20 cc in progress notes or >500 cc on catheterization 2) Physician order for Foley catheter >24 hours
2. Urinary tract infection	1) Progress notes 2) Microbiology results	1) Indication in progress notes of post-operative UTI 2) Post-op urine culture with >100,000 colonies/cc of bacteria
3. Deep venous thrombosis or pulmonary embolism	1) Post-op progress notes/consults 2) Radiology reports 3) Ultrasound reports 4) Plethmography reports 1) Post-op progress notes	1) Indication in progress notes/consults of clinical diagnosis 2) Venogram, ultrasound, or plethysmography indicating venous thrombosis 1) Indication of wound infection in progress notes (erythema, purulent drainage, necrotic margins)
4. Wound infection		
5. Skin breakdown	1) Post-op progress notes physician and/or nurses	1) Indication in notes of new pressure sores and/or decubitus ulcers
6. Post-op pneumonia	1) Post-op progress notes 2) Post-op chest x-ray	1) Indication of post-op pneumonia by EXR and clinical diagnosis (exclude atelectasis)
7. Post op sepsis	1) Progress notes 2) Microbiology results 1) Progress notes	1) Clinical diagnosis in progress notes and positive blood culture results post op
8. Cellulitis		1) Clinical diagnosis 2) IV site, wound, other
9. Altered mental status	1) Post-op progress notes physician and/or nurses	1) Indication in progress notes of new or worsened confusion, agitation, or disorientation post-op
10. Status at Discharge*		
a. Instability		
1. Fever	1) TPR sheets	1) > 38.3° C
2. New incontinence	1) Nursing notes	1) Yes or No
3. New chest pain	1) Nursing notes	1) Yes or No
4. New shortness of breath	1) Nursing notes	1) Yes or No
5. New confusion	1) Nursing notes	1) Yes or No
6. New heart rate	1) TPR sheets & nursing notes	1) > 130 beats/min
7. New respiratory rate	1) TPR sheets & nursing notes	1) > 30/min





# Chart Abstraction -- Elective Total Hip Replacement

INFO ITEM	SOURCE	PARAMETERS
8. Diastolic blood pressure	1) TPR sheets & nursing notes	1) > 105mm Hg
9. New systolic blood pressure	1) TPR sheets & nursing notes	1) < 90mm Hg
10. New low heart rate	1) TPR sheets & nursing notes	1) < 50 beats/min
11. New premature ventricular contractions	1) Nursing/physician notes	1) Yes or No
b. Sickness		
1. Fever	1) TPR sheets	1) > 38.3° C
2. New incontinence	1) Nursing notes	1) Yes or No
3. Chest pain	1) Nursing notes	1) Yes or No
4. Shortness of breath	1) Nursing notes	1) Yes or No
5. Confusion	1) Nursing notes	1) Yes or No
6. Heart rate	1) TPR sheets & nursing notes	1) > 130 beats/min
7. Respiratory rate	1) TPR sheets & nursing notes	1) > 30/min
8. Diastolic blood pressure	1) TPR sheets & nursing notes	1) > 105mm Hg
9. Systolic blood pressure	1) TPR sheets & nursing notes	1) < 90mm Hg
10. New decubitus	1) Nursing notes	1) Yes or No
11. Low heart rate	1) TPR sheets & nursing notes	1) < 50 beats/min
12. Premature ventricular contraction	1) TPR sheets & nursing notes	1) Yes or No
13. Parenteral antibiotics	1) IV notes	1) Yes or No
c. Abnormal last lab values		
1. Potassium	1) Laboratory sheets	1) Yes or No
2. Sodium	1) Laboratory sheets	1) Yes or No
3. Renal distress	1) Laboratory sheets	1) Yes or No
4. Low hematocrit	1) Laboratory sheets	1) Yes or No
5. High WBC	1) Laboratory sheets	1) Yes or No
6. Weight increase	1) TPR sheets & nursing notes	1) > 1.35 kg
7. CHF by roentgenographic worsening	1) X-ray sheets, physician notes	1) Yes or No
11. Unscheduled return to OR	1) Progress notes 2) Operative report	1) Presence or absence 2) Indication: A. Bleeding B. Wound infection C. Prosthesis failure D. Fracture repair E. Dislocation F. Other



# Chart Abstraction -- Elective Total Hip Replacement

<u>INFO ITEM</u>	<u>SOURCE</u>	<u>PARAMETERS</u>
12. Adverse drug reaction	1) Post-op progress notes physician and/or nurses	1) Indication in progress notes of adverse drug reaction 2) Type A. Rash B. Fever C. Decline in renal function (rise in serum creatinine) D. Other
13. Post-op ileus	1) Post-op progress notes 2) Order sheets 3) Post-op abdominal x-rays	1) Days post-op to resume pre-op diet 2) Post-op abdominal x-ray
14. Transfusion reaction	1) Transfusion record	1) Indication on transfusion record of transfusion reaction
15. Gastrointestinal complication	1) Post-op progress notes	1) Indication of GI bleeding: A. Hematemesis B. Heme + stool 2) New diagnosis of peptic ulcer and/or gastritis post-op
16. Pseudomembranous colitis	1) Post-op progress notes 2) Microbiology results	1) Clinical diagnosis of pseudomembranous, antibiotic associated or clostridium difficile diarrhea 2) Stool culture positive for clostridium difficile 3) Stool positive for clostridium difficile toxin 1) Yes or No 1) Specific location
17. In-hospital death		
18. Discharge destination	1) Discharge summary	1) Home health 2) Nursing home 3) Post-hospital PT 4) Rehab
19. Functional status at discharge	1) Discharge summary	
20. Plan for post-hospitalization services	1) Discharge summary	

\*Kosecoff J, K Kahn, et al.. Prospective Payment System and Impairment at Discharge. JAMA; 264:1980-1983, 1990.







## Appendix H

### Characteristics of Participating and Non-Participating Hospitals in the Pretest

Characteristics	Milwaukee, Wisconsin and Surrounding Rural Areas				Little Rock, Arkansas and Surrounding Rural Areas			
	Participating		Non-Participating		Participating		Non-Participating	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total Hospitals	16		15		12		17	
<u>Total Beds</u>								
under 100 beds	6	38%	6	40%	5	42%	9	53%
101-200 beds	3	19%	5	34%	3	25%	6	35%
201-300 beds	4	25%	0	0	1	8%	1	6%
301-400 beds	2	12%	2	13%	1	8%	1	6%
401 and over	1	6%	2	13%	2	17%	0	0
<u>Urban</u>	11	69%	7	47%	6	50%	2	12%
<u>Rural</u>	5	31%	8	53%	6	50%	15	88%
<u>Ownership</u>								
Non profit	9	56%	10	67%	4	33%	5	29%
Church	5	31%	5	33%	2	17%	3	18%
Hospital district	0	0	0	0	0	0	0	0
For-profit	0	0	0	0	0	0	3	18%
Government	2	13%	0	0	6	50%	6	35%
<u>Service Type</u>								
General Medical and Surgical	16	100%	15	100%	12	100%	17	100%
Orthopedic	0	0	0	0	0	0	0	0
Psychiatric	0	0	0	0	0	0	0	0
<u>Teaching</u>								
Residency training	5	31%	4	27%	3	25%	0	0
Medical school affiliation	6	38%	4	27%	3	25%	0	0









# Appendix I

## Number of Patients Identified by Hospitals Compared to the Number of Patients Reported to the National Claims History File

### WISCONSIN

Institution	<u>Cholecystectomy</u>				<u>Total Hip Replacement</u>			
	Percent Reported by Hospital Only	Percent Reported by NCH Only	Percent Reported by Both Source	Total Number of Cases	Percent reported by Hospital Only	Percent Reported by NCH Only	Percent Reported by Both Sources	Total Number of Cases
A	9.5	38.1	52.4	21				0
B	22.6	41.9	35.5	31	0.0	54.5	45.5	11
C	36.4	36.4	27.3	11	0.0	0.0	100.0	3
D	0.0	94.1	5.9	17	0.0	100.0	0.0	6
E	13.0	34.8	52.2	23	100.0	0.0	0.0	1
F	0.0	100.0	0.0	14	0.0	83.3	16.7	6
G	10.0	80.0	10.0	10	0.0	100.0	0.0	5
H	21.2	5.8	73.1	52	16.7	72.2	11.1	36
I	20.8	54.2	25.0	24	10.0	20.0	70.0	10
J	11.9	39.0	49.2	59	14.0	62.0	24.0	50
K	23.1	23.1	53.8	26	14.3	42.9	42.9	7
L	5.6	83.3	11.1	18	4.8	71.4	23.8	21
M	23.1	15.4	61.5	13				0
N	0.0	100.0	0.0	32	0.0	100.0	0.0	18
O	4.3	55.3	40.4	47	4.5	36.4	59.1	22
Total	13.1	28.9	58.0	398	9.2	63.8	27.0	196



# ARKANSAS

Institution	Percent Reported by Hospital Only	Percent Reported by NCH Only	Percent Reported by Both Source	Total Number of Cases	Percent reported by Hospital Only	Percent Reported by NCH Only	Percent Reported by Both Sources	Total Number of Cases
A	0.0	100.0	0.0	28		100.0		10
B	0.0	100.0	0.0	7		100.0		2
C	0.0	100.0	0.0	67		100.0		44
D	66.7	0.0	33.3	3				0
E	0.0	62.5	37.5	8				0
F	28.6	28.6	42.9	7				0
G	5.3	78.9	15.8	19				0
H	0.0	100.0	0.0	8		100.0		1
I	4.7	84.7	10.6	85	2.1	89.6	8.3	48
J	0.0	0.0	100.0	3				0
K	0.0	100.0	0.0	8	8.3	91.7		24
L	0.0	91.3	8.7	23		100.0		3
Total	3.4	87.6	9.0	266	2.3	94.7	3.0	132

Technical notes: empty cells reflect no reported cases  
The dates that hospitals began and ceased reporting cases are not exact.









## **Appendix J**

### **Sample FI Form and Code Structure**



12 PATIENT NAME											13 PATIENT ADDRESS																																																																												
14 DATE											15 SEX	16 MS	17 DATE	ADMISSION			21 D HR	22 STAT	23 MEDICAL RECORD NO.				24	CONDITION CODES				31																																																											
32 CODE											OCCURRENCE DATE	34 CODE	OCCURRENCE DATE	36 CODE	OCCURRENCE SPAN	37 A	B	C	39 CODE	VALUE CODES	41 CODE	VALUE CODES																																																																	
42 REV CD.											43 DESCRIPTION											44 HCPCS RATES											45 SERV. DATE											46 SERV. UNITS											47 TOTAL CHARGES											48 NON-COVERED CHARGES											49										
50 PAYER											51 PROVIDER NO											52 PRIOR PAYMENTS											53 EST AMOUNT											54																																											
57											58 INSURED'S NAME											59 CERT. - SSN - HIC - ID NO											60 GROUP NO											61 INSURANCE GROUP NO																																											
62 TREATMENT AUTHORIZATION CODES											63 EMPLOYER NAME											64 EMPLOYER GROUP NO											65											66																																											
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ICN 03-PAT-CTRL-NUM 04-TYP BIL 51-PROV LAST 12-PATIENT-NAME FIRST M 13-PATIENT-ADDRESS ADDR-1 ADDR-2

13-PATIENT-ADDRESS 14-BIRTH 15 16-MAR 17-ADM 19 20-ADM 21 22-PAT 06-STMT-COVERS 07-COV 08-NCOV 09-COIN 10-LR  
CITY STATE ZIP-CODE DATE SEX STAT DATE DATE TYP SRC DIS-HR STAT FROM THRU

32-OCCURRENCE 32-OCCURRENCE 32-OCCURRENCE 32-OCCURRENCE 32-OCCURRENCE  
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24-CONDITION 24-CONDITION 23-MED-REC-NUM  
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39A-VALUE 39A-VALUE 39A-VALUE 39A-VALUE 39A-VALUE  
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39B-VALUE 39B-VALUE 39B-VALUE 39B-VALUE 39B-VALUE  
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42-CD		44-RATE	HCPCS	H/M	H/M	45-SERV-DT	DESCRIPTION	46-UNITS	47-TOT-CHRG	48-NCOV-CHG	LINE-DEN	MAN PRICE	OVERRIDE
-----REVENUE-----													
0250						000000		13					
0258						000000		5					
0259						000000		8					
0270						000000		2					
0300						000000		4					
0300						000000		1					
0305						000000		1					
0305						000000		1					
0310						000000		2					
0320						000000		1					
0320						000000		1					
0360						000000		1					
0360						000000		1					
0370						000000		1					
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RECEIPT DATE	PROCESS DATE	ENT DATE	SUSP CLRK	LOC DATE	STAT DATE	LOC DATE	SUSP PRTS	OVER RIDE	CLR CODE	RA IND	RTI NUMBER	PER DIEM	NON BATCH	DENY CODE	DENY NCOV-CHARGE	SSA BATCH	PAID DATE	REQUERY CODE DATE
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OPEN ITEM N	REPLY DATE 000000	REPLY UPD-DATE 000000	REPLY UPD-CLERK 00	DISP CODE 00	INCORRECT LAST-NAME	INCORRECT INIT	INCORRECT HIC	CORRECT HIC	CR-BLOOD DED	QUERY AMT	QUERY CODE	DATE 000000
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--B-DATES---	B-PSYCH	B-DED	B-BLD	B-BLD	B-BLD	B-BLD	B-BLD	B-BLD	B-BLD	B-BLD	B-BLD	B-BLD
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--A-DATES---	A-PRIOR-DATES	PSYCH	SNF	S-COINS	FULL	COINS	LR	LAST-DISCHG	-H-H-	-PSYCH	YEAR-SPELL
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0000	0000	0000	0000	0000	0000	0000	0000	000000	N	N	OO

OUTL	MCE	-PRIOR--	--PART-A-DEDUCT	--CWF	IND--	---DME---	REDUCTION	-----MESSAGES-TO-USERS-----				
DAYS	CD	STAY-IND	AMOUNT	PINTS								
A		N										

CWF-ERR-CD	ERR-CODE	HCFA	POST-HOSPITALIZATION	OUTCOME	STUDY-	OUTPATIENT	ERROR-DESCRIPTION	ERROR-CONTENTS	NO-EDIT-CODE
	9CH								601

-----PATIENT-HISTORY-----												
ICN	TOB	PROV-NUM	COV	NCOV	BLOOD	ADMIT	STMT-FR	STMT-TO	PROCESS	PAID	DENY	TOTAL
			DAYS	DAYS	PNTS-DED	DATE	DATE	DATE	DATE	ENTRY	CD	CHARGES

-----END-OF-RTI/ADJ-CLAIM-----



## MEDICARE PART A SUSPENSE SHEET FOR CLAIM

## A. PURPOSE.

1. DESCRIPTION:  
M70065-A DETAILS EACH CLAIM THAT DID NOT PASS THE CLAIM EDITS.
2. DISTRIBUTION/USE:  
THE REPORT IS USED BY MEDICARE A CLAIMS OPERATION TO HELP RESOLVE SUSPENDED CLAIMS.
3. SEQUENCE:  
SEQUENCE ON THE REPORT IS DETERMINED BY CLERK ASSIGNMENT ON THE SYSTEM CONTROL SCREEN.
4. FREQUENCY:  
M70065-A IS PRODUCED DAILY.

## B. SELECTION CRITERIA.

CLAIMS THAT ARE REPORTED ON THIS REPORT HAVE FAILED ONE OR MORE EDITS DURING THE CLAIM EDIT PROCESS.

## C. SUBTOTAL AND/OR PAGE BREAK CRITERIA

NONE.

## D. REPORT ELEMENTS (UNLESS OTHERWISE NOTED, ALL REPORT ELEMENTS ARE FROM DATA LOCATED ON THE CLAIM RECORD.)

- 1) HIC
  - DEFINITION - HEALTH INSURANCE CLAIM NUMBER
  - SOURCE - UB1K-HIB-NO
  - SIZE - 19 CHARACTERS.
- 2) ICN
  - DEFINITION - INTERNAL CONTROL NUMBER. UNIQUE NUMBER ASSIGNED TO A CLAIM WHEN IT IS RECEIVED IN CLAIMS PROCESSING. IT CONTAINS THE DATE RECEIVED AND THE SEQUENCE NUMBER. IF THE CLAIM IS NOT CONSIDERED TO BE 'CLEAN', '\*\*\*\*' WILL BE FOUND ABOVE THE ICN TITLE.
  - SOURCE - UB1K-ICN
  - SIZE - MAXIMUM IS 23 CHARACTERS.
- 3) 03-PAT-CTRL-NUM
  - DEFINITION - PATIENT CONTROL NUMBER. ASSIGNED BY THE PROVIDER FOR IDENTIFICATION PURPOSES. FORM LOCATOR = 03.
  - SOURCE - UB1C-03-PATIENT-CONTROL-NO
  - SIZE - 20 CHARACTERS.
- 4) 04-TYP-BIL
  - DEFINITION - CODE DESCRIBING THE TYPE OF BILL. FORM LOCATOR = 04.
  - SOURCE - UB1C-04-TYPE-OF-BILL
  - SIZE - THREE CHARACTERS.



## MEDICARE PART A SUSPENSE SHEET FOR CLAIM HIC

- 
- 5) 51-PROV  
- DEFINITION - PROVIDER. THE INSTITUTION OR PHYSICIAN WHO PROVIDES MEDICAL SERVICES.  
FORM LOCATOR = 51.  
- SOURCE - UB1C-51-PROVIDER  
- SIZE - 10 CHARACTERS.
- 6) 12-PATIENT-NAME-LAST  
- DEFINITION - THE LAST NAME OF THE PATIENT.  
FORM LOCATOR = 12.  
- SOURCE - UB1C-12-PATIENT-LAST-NAME  
- SIZE - 20 CHARACTERS.
- 7) 12-PATIENT-NAME-FIRST  
- DEFINITION - THE FIRST NAME OF THE PATIENT.  
FORM LOCATOR = 12.  
- SOURCE - UB1C-12-PATIENT-FIRST-NAME  
- SIZE - TEN CHARACTERS.
- 8) 12-PATIENT-NAME-MID  
- DEFINITION - THE MIDDLE INITIAL OF THE PATIENT.  
FORM LOCATOR = 12.  
- SOURCE - UB1C-12-PATIENT-MID-INIT  
- SIZE - ONE CHARACTER.
- 9) 13-PATIENT-ADDRESS-ADDR-1  
- DEFINITION - THE FIRST LINE OF THE PATIENT'S ADDRESS.  
FORM LOCATOR = 13.  
- SOURCE - UB1C-13-PATIENT-ADDR-1  
- SIZE - 18 CHARACTERS.
- 10) 13-PATIENT-ADDRESS-ADDR-2  
- DEFINITION - THE REMAINDER OF THE PATIENT'S ADDRESS.  
FORM LOCATOR = 13.  
- SOURCE - UB1C-13-PATIENT-ADDR-2  
- SIZE - 18 CHARACTERS.
- 11) 13-PATIENT-ADDRESS-CITY  
- DEFINITION - THE CITY IN WHICH THE PATIENT RESIDES.  
FORM LOCATOR = 13.  
- SOURCE - UB1C-13-PATIENT-CITY  
- SIZE - 15 CHARACTERS.
- 12) 13-PATIENT-ADDRESS-STATE  
- DEFINITION - THE STATE IN WHICH THE PATIENT RESIDES.  
FORM LOCATOR = 13.  
- SOURCE - UB1C-13-PATIENT-STATE  
- SIZE - TWO CHARACTERS.





## MEDICARE PART A SUSPENSE SHEET FOR CLAIM HIC

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- 13) 13-PATIENT-ADDRESS-ZIP-CODE  
- DEFINITION - THE ZIP CODE ASSIGNED TO THE AREA IN WHICH  
THE PATIENT RESIDES.  
FORM LOCATOR = 13.  
- SOURCE - UB1C-13-PATIENT-ZIP  
- SIZE - NINE CHARACTERS.
- 14) 14-BIRTH-DATE  
- DEFINITION - THE BIRTH DATE OF THE PATIENT.  
FORM LOCATOR = 14.  
- SOURCE - UB1C-14-PATIENT-BIRTH-DATE  
- SIZE - EIGHT DIGITS AS MMDDYYYY.
- 15) 15-SEX  
- DEFINITION - THE SEX OF THE PATIENT.  
FORM LOCATOR = 15.  
- SOURCE - UB1C-15-PATIENT-SEX  
- SIZE - ONE CHARACTER.
- 16) 16-MAR-STAT  
- DEFINITION - MARITAL STATUS OF THE PATIENT.  
FORM LOCATOR = 16.  
- SOURCE - UB1C-16-PATIENT-MARITAL-STATUS  
- SIZE - ONE CHARACTER.
- 17) 17-ADM-DATE  
- DEFINITION - DATE OF ADMISSION OF THE PATIENT.  
FORM LOCATOR = 17.  
- SOURCE - UB1C-17-ADMISSION-DATE  
- SIZE - SIX DIGITS.
- 18) 19-TYP  
- DEFINITION - THE TYPE OF ADMISSION.  
FORM LOCATOR = 19.  
- SOURCE - UB1C-19-TYPE-OF-ADMISSION  
- SIZE - ONE CHARACTER.
- 19) 20-ADM-SRC  
- DEFINITION - SOURCE OF ADMISSION.  
FORM LOCATOR = 20.  
- SOURCE - UB1C-20-SOURCE-OF-ADMISSION  
- SIZE - ONE CHARACTER.
- 20) 21-DIS-HR  
- DEFINITION - DISCHARGE HOUR.  
FORM LOCATOR = 21.  
- SOURCE - UB1C-21-DISCHARGE-HOUR  
- SIZE - TWO CHARACTERS.



## MEDICARE PART A SUSPENSE SHEET FOR CLAIM HIC

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- 21) 22-PAT-STAT  
- DEFINITION - THE PATIENT'S STATUS.  
FORM LOCATOR = 22.  
- SOURCE - UB1C-22-PATIENT-STATUS  
- SIZE - TWO CHARACTERS.
- 22) 06-STMT-COVERS-FROM  
- DEFINITION - FIRST DATE OF SERVICE ON THE CLAIM.  
FORM LOCATOR = 06.  
- SOURCE - UB1C-06-STMT-COVERS-FROM  
- SIZE - SIX DIGITS (A DATE).
- 23) 06-STMT-COVERS-THRU  
- DEFINITION - LAST DATE OF SERVICE ON THE CLAIM.  
FORM LOCATOR = 06.  
- SOURCE - UB1C-06-STMT-COVERS-THRU  
- SIZE - SIX DIGITS (A DATE).
- 24) DAYS-OR-VISITS-USED-07-COV  
- DEFINITION - NUMBER OF DAYS COVERED.  
FORM LOCATOR = 07.  
- SOURCE - UB1C-07-COVERED-DAYS  
- SIZE - MAXIMUM IS 999.
- 25) DAYS-OR-VISITS-USED-08-NCOV  
- DEFINITION - NUMBER OF DAYS NOT COVERED.  
FORM LOCATOR = 08.  
- SOURCE - UB1C-08-NON-COVERED-DAYS  
- SIZE - MAXIMUM IS 9999.
- 26) DAYS-OR-VISITS-USED-09-COIN  
- DEFINITION - NUMBER OF COINSURANCE DAYS.  
FORM LOCATOR = 09.  
- SOURCE - UB1C-09-CO-INS-DAYS  
- SIZE - MAXIMUM IS 999.
- 27) DAYS-OR-VISITS-USED-10-LR  
- DEFINITION - NUMBER OF LIFETIME RESERVE DAYS.  
FORM LOCATOR = 10.  
- SOURCE - UB1C-10-LIFETIME-RESERVE-DAYS  
- SIZE - MAXIMUM IS 999.
- 28) 32-OCCURENCE-CD (THIS OCCURS 10 TIMES)  
- DEFINITION - THE OCCURRENCE CODE.  
FORM LOCATOR = 32.  
- SOURCE - UB1C-32-OCCUR-CODE  
- SIZE - TWO CHARACTERS.



## MEDICARE PART A SUSPENSE SHEET FOR CLAIM HIC

## 29) 32-OCCURENCE-DESCRIPTION

- DEFINITION - DESCRIPTION OF THE OCCURRENCE.
- SOURCE - W-OCCURENCE-TITLE - DEPENDENT ON THE UB1C-32-OCCUR-CODE. THE DESCRIPTIONS ARE HARDCODED INTO THE PROGRAM WITH THE FOLLOWING VALUES:

CODE	DESCRIPTION
01	AUTO ACDNT
02	AUTO/NOFLT
03	ACDNT/TORT
04	ACDNT/EMPL
05	OTHR ACDNT
06	CRIME VICT
10	LAST MENST
11	ONSET SYMP
20	GUARN PMNT
21	UR NOTICE
22	CARE ENDED
23	BENE EXHST
24	INS DENIED
25	BENE TERM
26	SNF AVAIL
27	HH PLAN ES
28	CORF PLAN
29	OPT PLAN
30	SPCH PLAN
31	BENE ACCOM
32	BENE PROC
33	ESRD 1STMO
40	SCHED ADM
41	PREADM TST
42	DISCH DATE
70	QUAL STAY
71	PRIOR STAY
72	1ST/LST VS
73	BENE ELIG
74	NCOV LOC
75	SNF LOC
76	PAT LIAB

- SIZE - TEN CHARACTERS.

## 30) 32-OCCURENCE-DATE (THIS OCCURS 10 TIMES)

- DEFINITION - THE DATE OF THE OCCURRENCE.  
FORM LOCATOR = 32.
- SOURCE - UB1C-32-OCCUR-DATE
- SIZE - SIX DIGITS.



## MEDICARE PART A SUSPENSE SHEET FOR CLAIM HIC

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- 31) 36-OCCURENCE-CD (THIS OCCURS 4 TIMES)  
- DEFINITION - THE OCCURRENCE SPAN CODE.  
FORM LOCATOR = 36.  
- SOURCE - UB1C-36-OCCUR-SPAN-CODE  
- SIZE - TWO CHARACTERS.
- 32) 36-OCCURENCE-DESCRIPTION (THIS OCCURS 4 TIMES)  
- DEFINITION - DESCRIPTION OF THE OCCURRENCE SPAN CODE.  
- SOURCE - W-OCCURENCE-TITLE - SEE DETAILS FOR  
28-OCCURENCE-DESCRIPTION ABOVE.  
- SIZE - TEN CHARACTERS.
- 33) 36-OCCURENCE-FROM (THIS OCCURS 4 TIMES)  
- DEFINITION - THE OCCURRENCE SPAN BEGINNING DATE.  
FORM LOCATOR = 36.  
- SOURCE - UB1C-36-OCCUR-SPAN-FROM-DATE  
- SIZE - SIX DIGITS.
- 34) 36-OCCURENCE-THRU (THIS OCCURS 4 TIMES)  
- DEFINITION - THE OCCURRENCE SPAN ENDING DATE.  
FORM LOCATOR = 36.  
- SOURCE - UB1C-36-OCCUR-SPAN-THRU-DATE  
- SIZE - SIX DIGITS.
- 35) 24-CONDITION-CD (THIS OCCURS 10 TIMES)  
- DEFINITION - THE CONDITION CODE.  
FORM LOCATOR = 24.  
- SOURCE - UB1C-24-CONDITION-CODE  
- SIZE - TWO CHARACTERS.
- 36) 24-CONDITION-DESCRIPTION (THIS OCCURS 10 TIMES)  
- DEFINITION - DESCRIPTION OF THE CONDITION.  
- SOURCE - W-CONDITION-TITLE - DEPENDENT ON THE UB1C-  
24-CONDITION-CODE. THE DESCRIPTIONS ARE  
STORED IN COPY MEMBER M70TITL.  
- SIZE - TEN CHARACTERS.
- 37) BLOOD PINTS 40-F  
- DEFINITION - THE NUMBER OF PINTS OF BLOOD FURNISHED.  
- SOURCE - UB1R-BLOOD-PINTS-FURNURNISHED  
- SIZE - MAXIMUM IS 999.
- 38) BLOOD PINTS 41-R  
- DEFINITION - THE NUMBER OF PINTS OF BLOOD REPLACED.  
- SOURCE - CALCULATED  
- SIZE - MAXIMUM IS 999.





## MEDICARE PART A SUSPENSE SHEET FOR CLAIM HIC

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- 39) BLOOD PINTS 42-N  
- DEFINITION - THE NUMBER OF PINTS OF BLOOD NOT REPLACED.  
- SOURCE - UB1R-BLOOD-PINTS-NOT-REPL  
- SIZE - MAXIMUM IS 999.
- 40) BLOOD PINTS 43-D  
- DEFINITION - THE NUMBER OF PINTS OF BLOOD - DEDUCTIBLE.  
- SOURCE - VALUE CODE = 38  
- SIZE - MAXIMUM IS 9.
- 
- 42) 23-MED-REC-NUM  
- DEFINITION - MEDICAL RECORD NUMBER. USED FOR IDENTIFI-  
CATION PURPOSES. FORM LOCATOR = 09 OR 23  
- SOURCE - UB1C-23-MEDICAL-REC-NO  
- SIZE - SEVENTEEN CHARACTERS.
- 43) 39-VALUE CD (THIS OCCURS 12 TIMES)  
- DEFINITION - VALUE DATA CODE.  
FORM LOCATOR = 39.  
- SOURCE - UB1C-39-VALUE-CODE  
- SIZE - TWO CHARACTERS.
- 44) 39A-VALUE DESCRIPTION  
- DEFINITION - THE VALUE DESCRIPTION. (OCCURS 12 TIMES)  
FORM LOCATOR = 39.  
- SOURCE - W-VALUE-TITLE - DEPENDENT ON THE UB1C-  
39-VALUE-CODE. THE DESCRIPTIONS ARE  
STORED IN COPY MEMBER M70TITL.  
- SIZE - TEN CHARACTERS.
- 45) 39A-VALUE AMOUNT (THIS OCCURS 12 TIMES)  
- DEFINITION - THE VALUE AMOUNT.  
FORM LOCATOR = 39  
- SOURCE - UB1C-39-VALUE-AMT  
- SIZE - MAXIMUM IS 9,999,999.99
- 46) PAYER 50-ID OCCURS 3 TIMES  
- DEFINITION - PAYER ID CODE.  
FORM LOCATOR = 50.  
- SOURCE - UB1C-50-PAYER-ID  
- SIZE - ONE CHARACTER.



## MEDICARE PART A SUSPENSE SHEET FOR CLAIM HIC

- 
- 47) PAYER 50-NAME OCCURS 3 TIMES  
- DEFINITION - THE PAYER'S NAME.  
FORM LOCATOR = 50.  
- SOURCE - UB1C-50-PAYER-NAME  
- SIZE - 24 CHARACTERS.
- 48) PAYER DEDUCTABLE  
- DEFINITION - THE DEDUCTIBLE AMOUNT.  
- SOURCE - VALUE CODE = A1, B1, C1  
- SIZE - MAXIMUM IS 9,999,999.99
- 49) PAYER CO-INS  
- DEFINITION - THE COINSURANCE AMOUNT.  
- SOURCE - VALUE CODE = A2, B2, C2  
- SIZE - MAXIMUM IS 9,999,999.99
- 50) PAYER 54-PRI-PMNT OCCURS 3 TIMES  
- DEFINITION - THE PRIOR PAYMENT AMOUNT.  
FORM LOCATOR = 54.  
- SOURCE - UB1C-54-PRIOR-PAYMENT-AMT  
- SIZE - MAXIMUM IS 99,999,999.99
- 51) 54-PATIENT PAYMENT  
- DEFINITION - THE PATIENT PAYMENT  
FORM LOCATOR = 54P.  
- SOURCE - UB1C-54P-PATIENT-PAYMENT-AMT  
- SIZE - MAXIMUM IS 99,999,999.99
- 52) DRG A-LOS  
- DEFINITION - AVERAGE LENGTH OF STAY.  
- SOURCE - UB1P-PPS-AVE-LENGTH-STAY. PRICING DATA.  
- SIZE - MAXIMUM IS 99.9
- 53) DRG NUM  
- DEFINITION - DRG CODE.  
- SOURCE - UB1P-PPS-DRG-CODE. PRICING DATA.  
- SIZE - MAXIMUM IS 999.
- 54) DRG AMOUNT  
- DEFINITION - DRG AMOUNT.  
- SOURCE - UB1P-PPS-DRG-AMT. PRICING DATA.  
- SIZE - MAXIMUM IS 9,999,999.99
- 55) TEACH ADJ  
- DEFINITION - TEACHING ADJUSTMENT.  
- SOURCE - UB1P-PPS-INDIRECT-TEACH-ADJ. PRICING DATA.  
- SIZE - MAXIMUM IS 999,999.99



## MEDICARE PART A SUSPENSE SHEET FOR CLAIM HIC

- 
- 56) OUTL DAYS  
- DEFINITION - OUTLIER DAYS.  
- SOURCE - UB1P-PPS-OUTLIER-APPR-DAYS. PRICING DATA.  
- SIZE - MAXIMUM IS 999.
- 57) MCE CODE  
- DEFINITION - MCE EDIT CODE.  
- SOURCE - UB1P-PPS-MCE-EDIT-CODE. PRICING DATA.  
- SIZE - ONE CHARACTER.
- 58) 58-INSURED-NAME OCCURS 3 TIMES  
- DEFINITION - INSURED NAME.  
FORM LOCATOR = 58.  
- SOURCE - UB1C-58-INSURED-NAME.  
- SIZE - 25 CHARACTERS.
- 
- 60) 59-REL OCCURS 3 TIMES  
- DEFINITION - PATIENT RELATION.  
FORM LOCATOR = 59.  
- SOURCE - UB1C-59-PATIENT-RELATION  
- SIZE - TWO CHARACTERS.
- 61) RELATION-DESCRIPTION OCCURS 3 TIMES  
- DEFINITION - DESCRIPTION OF THE PATIENT RELATION.  
- SOURCE - W-RELATION-TITLE - DEPENDENT ON THE UB1C-59-PATIENT-RELATION.  
- SIZE - TEN CHARACTERS.
- 62) 60-CERT-SSN-HIC-ID OCCURS 3 TIMES  
- DEFINITION - HEALTH INSURANCE BENEFICIARY NUMBER.  
FORM LOCATOR = 60.  
- SOURCE - UB1C-60-CERT-SSN-HIB-ID-NO  
- SIZE - 19 CHARACTERS.
- 63) 61-GROUP-NAME OCCURS 3 TIMES  
- DEFINITION - GROUP NAME OF THE INSURED.  
FORM LOCATOR = 61.  
- SOURCE - UB1C-61-GROUP-NAME  
- SIZE - 14 CHARACTERS
- 64) 62-GROUP-NUMBER OCCURS 3 TIMES  
- DEFINITION - GROUP NUMBER.  
FORM LOCATOR = 62.  
- SOURCE - UB1C-62-GROUP-NO  
- SIZE - 17 CHARACTERS.



## MEDICARE PART A SUSPENSE SHEET FOR CLAIM HIC

66) EMPLOYMENT 64-STAT DESCRIPTION OCCURS 3 TIMES  
- DEFINITION - EMPLOYMENT STATUS CODE.  
FORM LOCATOR = 64.  
- SOURCE - UB1C-64-EMPLOYMENT-STATUS-CODE  
- SIZE - ONE CHARACTER.

67) EMPLOYMENT 65-NAME OCCURS 3 TIMES  
- DEFINITION - EMPLOYER NAME.  
FORM LOCATOR = 65.  
- SOURCE - UB1C-65-EMPLOYER-NAME  
- SIZE - 24 CHARACTERS.

69A) 66-EMP-ADDRESS OCCURS 3 TIMES  
- DEFINITION - EMPLOYER ADDRESS  
FORM LOCATOR = 66.  
- SOURCE - UB1C-66-EMP-ADDRESS  
- SIZE - 18 CHARACTERS.

69B) 66-EMP-CITY OCCURS 3 TIMES  
- DEFINITION - EMPLOYER CITY  
FORM LOCATOR = 66.  
- SOURCE - UB1C-66-EMP-CITY  
- SIZE - 15 CHARACTERS.

69C) 66-EMP-STATE OCCURS 3 TIMES  
- DEFINITION - EMPLOYER STATE  
FORM LOCATOR = 66.  
- SOURCE - UB1C-66-EMP-STATE  
- SIZE - 02 CHARACTERS.

69D) 66-EMP-ZIP OCCURS 3 TIMES  
- DEFINITION - EMPLOYER ZIP CODE  
FORM LOCATOR = 66.  
- SOURCE - UB1C-66-EMP-ZIP  
- SIZE - 09 CHARACTERS.

69E) 65-CHG-REASON OCCURS 3 TIMES  
- DEFINITION - EMPLOYMENT CHANGE REASON  
FORM LOCATOR = 66.  
- SOURCE - UB1C-65-EMP-CHG-REASON-CD  
- SIZE - 09 CHARACTERS.

70) 76-ADMISSION-DIAGNOSIS  
- DEFINITION - DIAGNOSIS AT ADMISSION  
FORM LOCATOR = 76.  
- SOURCE - UB1C-76-ADMISSION-DIAG  
- SIZE - 6 CHARACTERS.

72) 67-PRI-DIAG  
- DEFINITION - PRINCIPAL DIAGNOSIS.  
FORM LOCATOR = 67.  
- SOURCE - UB1C-67-PRINCIPAL-DIAG  
- SIZE - SIX CHARACTERS.

73) 68-OTH-DIAG (OCCURS 8 TIMES)  
- DEFINITION - OTHER DIAGNOSIS.  
FORM LOCATOR = 68-75.  
- SOURCE - UB1C-68-75-OTHER-DIAG  
- SIZE - SIX CHARACTERS.





## MEDICARE PART A SUSPENSE SHEET FOR CLAIM HIC

- 
- 75) 80-PRI-PROC  
- DEFINITION - THE PRINCIPLE PROCEDURE CODE.  
FORM LOCATOR = 80.  
- SOURCE - UB1C-80-PRINCIPLE-PROC-CODE  
- SIZE - 7 CHARACTERS.
- 76) 88-PRI-DATE  
- DEFINITION - PRINCIPLE PROCEDURE DATE.  
FORM LOCATOR = 80.  
- SOURCE - UB1C-80-PRINCIPLE-PROC-DATE  
- SIZE - SIX DIGITS.
- 77) 81-OTH-PROC (OCCURS 5 TIMES)  
- DEFINITION - OTHER PROCEDURE DATA.  
FORM LOCATOR = 81.  
- SOURCE - UB1C-81-PROC-CODE  
- SIZE - 7 CHARACTERS.
- 78) 81-OTH-DATE (OCCURS 5 TIMES)  
- DEFINITION - OTHER PROCEDURE DATE.  
FORM LOCATOR = 81.  
- SOURCE - UB1C-81-PROC-DATE  
- SIZE - SIX DIGITS.
- 79) 77-E-CODE  
- DEFINITION -  
FORM LOCATOR = 77.  
- SOURCE - UB1C-77-E-CODE  
- SIZE - SIX CHARACTER.
- 80) 79-PC-METHOD  
- DEFINITION -  
FORM LOCATOR = 79.  
- SOURCE - UB1C-79-PC-METHOD  
- SIZE - ONE DIGITS.
- 81) 63-TREATMENT-AUTH (OCCURS 3 TIMES)  
- DEFINITION - TREATMENT AUTHOR-CODE  
FORM LOCATOR = 63.  
- SOURCE - UB1C-63-TREATMENT-AUTH-CODE  
- SIZE - 18 DIGITS.



## MEDICARE PART A SUSPENSE SHEET FOR CLAIM HIC

- 
- 83) 82-ATTENDING-PHYSICIAN  
- DEFINITION - THE ATTENDING PHYSICIAN'S NAME.  
FORM LOCATOR = 82.  
- SOURCE - UB1C-82-ATTENDING-PHYSICIAN  
- SIZE - 22 CHARACTERS.
- 84A) 83-OTHER-PHYSICIAN-1  
- DEFINITION - THE 2ND PHYSICIAN'S NAME.  
FORM LOCATOR = 83.  
- SOURCE - UB1C-93-OTHER-PHYSICIAN-1  
- SIZE - 22 CHARACTERS.
- 84B) 83-OTHER-PHYSICIAN-2  
- DEFINITION - THE 3RD PHYSICIAN'S NAME.  
FORM LOCATOR = 83.  
- SOURCE - UB1C-83-OTHER-PHYSICIAN-2  
- SIZE - 22 CHARACTERS.
- 86) 94-REMARKS (THIS OCCURS 4 TIMES)  
- DEFINITION - A SECTION AVAILABLE FOR COMMENTS.  
FORM LOCATOR = 94.  
- SOURCE - UB1C-94-REMARKS  
- SIZE - 48 CHARACTERS.
- 88) VERIFY-NON-COV-STAY FROM  
- DEFINITION - DATE NON-COVERED STAY BEGAN.  
- SOURCE - UB1I-A-VER-NON-COVER-STAY-FROM. INTER-  
MEDIARY DATA.  
- SIZE - SIX DIGIT DATE.
- 89) VERIFY-NON-COV-STAY THRU  
- DEFINITION - DATE NON-COVERED STAY ENDED.  
- SOURCE - UB1I-B-VER-NON-COVER-STAY-THRU. INTER-  
MEDIARY DATA.  
- SIZE - SIX DIGIT DATE.
- 90) PRIOR-PSYCH DAYS  
- DEFINITION - PRIOR NUMBER OF DAYS OF PSYCHIATRIC  
TREATMENT.  
- SOURCE - UB1I-C-PRIOR-PSYCH-DAYS.  
- SIZE - MAXIMUM IS 999.
- 91) OTHER  
- DEFINITION - AN OPEN FIELD.  
- SOURCE - UB1I-D-UNLABELED.  
- SIZE - EIGHT CHARACTERS.
- 92) OTHER  
- DEFINITION - AN OPEN FIELD.  
- SOURCE - UB1I-E-UNLABELED.  
- SIZE - EIGHT CHARACTERS.



## MEDICARE PART A SUSPENSE SHEET FOR CLAIM HIC

- 
- 93) REIMB AMOUNT  
- DEFINITION - INTERMEDIARY REIMBURSEMENT AMOUNT.  
- SOURCE - UB1I-F-REIMBURSEMENT-AMT.  
- SIZE - MAXIMUM IS 9,999,999.99
- 94) NON-PAY CODE  
- DEFINITION - CODE TO FLAG NON-PAYMENT.  
- SOURCE - UB1I-G-NON-PAYMENT-CODE.  
- SIZE - ONE CHARACTER.
- 95) SSA SCRAM  
- DEFINITION - SSA SCRAMBLE CODE.  
- SOURCE - UB1I-H-SSA-SCRAMBLE-CODE.  
- SIZE - ONE CHARACTER.
- 96) OTHER  
- DEFINITION - AN OPEN FIELD.  
- SOURCE - UB1I-I-UNLABLED.  
- SIZE - THREE CHARACTERS.
- 97) APPROV CLERK  
- DEFINITION - IDENTIFIES THE CLERK HANDLING THE CLAIM.  
- SOURCE - UB1I-J-APPROVED-BY-CLERK.  
- SIZE - THREE CHARACTERS.
- 98) APPROV DATE  
- DEFINITION - DATE OF CLAIM APPROVAL.  
- SOURCE - UB1I-K-APPROVED-DATE.  
- SIZE - SIX DIGIT DATE.
- 99) REVENUE 44-RATE/HPCPS  
- DEFINITION - REVENUE RATE.  
FORM LOCATOR = 44.  
- SOURCE - UB1C-44-REVENUE-RATE  
- SIZE - MAXIMUM IS 9,999,999.99
- 99B) REVENUE 44-HPCPS  
- DEFINITION -  
FORM LOCATOR = 44.  
- SOURCE - UB1C-44-HPCPS-CODE  
- SIZE - MAXIMUM IS 5 CHARTERS
- 99C) REVENUE 44-HPCPS-MOD1  
- DEFINITION -  
FORM LOCATOR = 44.  
- SOURCE - UB1C-44-HPCPS-MOD1  
- SIZE - MAXIMUM IS 2 CHACTERS
- 99) REVENUE 44-HPCPS-MOD2  
- DEFINITION -  
FORM LOCATOR = 44.  
- SOURCE - UB1C-44-HPCPS-MOD2  
- SIZE - MAXIMUM IS 2 CHARACTERS
- 100) REVENUE 42-CD  
- DEFINITION - REVENUE CODE.  
FORM LOCATOR = 42.  
- SOURCE - UB1C-42-REVENUE-CODE  
- SIZE - MAXIMUM IS 4.
- 101) REVENUE DESCRIPTION  
- DEFINITION - SEE SOURCE SECTION BELOW.  
FORM LOCATOR = 42.  
- SOURCE - W-REVENUE-TITLE - DEPENDENT ON THE UB1C-42-REVENUE-CODE. THE DESCRIPTIONS ARE STORED IN COPY MEMBER M70TITL.  
- SIZE - TWENTY CHARACTERS.



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MEDICARE PART A SUSPENSE SHEET FOR CLAIM HIC  
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- 102) REVENUE 46-UNITS  
- DEFINITION - NUMBER OF UNITS OF SERVICE.  
FORM LOCATOR = 46.  
- SOURCE - UB1C-46-UNITS-OF-SERVICE  
- SIZE - MAXIMUM IS 7 CHARACTERS.
- 103) REVENUE 47-TOT-CHARGE  
- DEFINITION - TOTAL CHARGES.  
FORM LOCATOR = 47.  
- SOURCE - UB1C-47-TOTAL-CHARGES  
- SIZE - MAXIMUM IS 99,999,999.99
- 104) REVENUE 48-NCOV-CHG  
- DEFINITION - NON-COVERED CHARGES.  
FORM LOCATOR = 48.  
- SOURCE - UB1C-48-NON-COVERED-CHARGES  
- SIZE - MAXIMUM IS 99,999,999.99
- 105) REVENUE 49-OVERRIDE-CODE  
- DEFINITION - OVERRIDE CODE.  
FORM LOCATOR = 49.  
- SOURCE - UB1C-49-OVERRIDE-CODE  
- SIZE - ONE CHARACTER.
- 106) REVENUE 49-LINE-DENIAL  
- DEFINITION - DENIAL CODE  
FORM LOCATOR = 49.  
- SOURCE - UB1C-49-LINE-DENIAL-CODE  
- SIZE - 2 CHARACTERS
- 106B) REVENUE 49-MANUAL PRICE  
- DEFINITION - PRICE CODE  
FORM LOCATOR = 49.  
- SOURCE - UB1C-49-MANUAL-PRICE-CODE  
- SIZE - 1 CHARACTERS
- 107) RECEIPT DATE  
- DEFINITION - FOR THE ORIGINAL CLAIM, RECEIPT DATE IS  
THE DATE THE CLAIM IS RECEIVED BY THE  
INTERMEDIARY.  
- SOURCE - UB1S-RECEIPT-DATE. SYSTEM DATA.  
- SIZE - SIX DIGIT DATE.
- 108) PROCESS DATE  
- DEFINITION - DATE OF THE PROCESS.  
- SOURCE - UB1S-PROCESS-DATE.  
- SIZE - SIX DIGIT DATE.
- 109) ENT CLRK  
- DEFINITION - IDENTIFICATION CODE OF THE ENTRY CLERK.  
- SOURCE - UB1U-ENTRY-CLERK.  
- SIZE - THREE CHARACTERS.
- 110) SUSP CLRK  
- DEFINITION - IDENTIFICATION CODE OF THE SUSPENSE CLERK.  
- SOURCE - UB1U-SUSPENSE-CLERK.  
- SIZE - THREE CHARACTERS.
- 111) LOC  
- DEFINITION - IDENTIFIES CLAIM'S LOCATION.  
- SOURCE - UB1S-LOCATION-CODE.  
- SIZE - MAXIMUM IS 99.





## MEDICARE PART A SUSPENSE SHEET FOR CLAIM HIC

- 112) STAT  
- DEFINITION - IDENTIFIES CLAIM'S STATUS.  
- SOURCE - UB1S-STATUS-CODE.  
- SIZE - MAXIMUM IS 99.
- 113) LOC-STAT DATE  
- DEFINITION - DATE CLAIM WAS PUT IN CURRENT LOCATION STATUS.  
- SOURCE - UB1S-LOC-STAT-DATE.  
- SIZE - SIX DIGIT DATE.
- 114) SUSP PRTS  
- DEFINITION - THE NUMBER OF TIMES THE CLAIM HAS BEEN  
SUSPENDED AND A SUSPENSE SHEET PRINTED.  
- SOURCE - UB1S-SUSPENSE-SHEET-PRT-COUNT.  
- SIZE - MAXIMUM IS 999.
- 115) OVERRIDE  
- DEFINITION - TELLS IF A CLAIM WAS OVERRIDDEN AT ENTRY.  
- SOURCE - UB1U-ENTRY-OVERRIDE-CODE.  
- SIZE - ONE CHARACTER.
- 116) CLR CODE  
- DEFINITION - INDICATES WHETHER OR NOT TO RELEASE A CLAIM  
TO THE SYSTEM FROM SUSPENSE.  
- SOURCE - UB1S-CLEAR-CODE.  
- SIZE - ONE CHARACTER.
- 117) RA IND  
- DEFINITION - INDICATES WHETHER OR NOT THE CLAIM WILL  
PRINT ON THE REMITTANCE ADVICE.  
- SOURCE - UB1U-REMIT-ADVICE-IND.  
- SIZE - ONE CHARACTER.
- 118) RTI NUMBER  
- DEFINITION - INDICATES CLAIM RETURNED TO INTERMEDIARY.  
- SOURCE - UB1S-RTI-CONTROL-NO.  
- SIZE - MAXIMUM IS 999999.
- 119) PER DIEM  
- DEFINITION - THE AMOUNT USED TO PRICE INPATIENT CLAIMS  
THAT USE THE PER DIEM PRICING METHOD.  
- SOURCE - UB1P-INPATIENT-PER-DIEM.  
- SIZE - MAXIMUM IS 99,999.99
- 120) NON BATCH  
- DEFINITION - INDICATES THE TYPE OF BATCH CLAIM.  
'1' = MANUAL ADJUSTMENT OR OUTPATIENT  
FULL DENIAL AND DEBIT/CREDIT CODE  
OF '6', '7', '8', OR '9'.  
'2' = RTI ADJUSTMENT AND DEBIT/CREDIT CODE  
OF '9'.  
- SOURCE - UB1S-NON-BATCH-IND.  
- SIZE - ONE CHARACTER.



## MEDICARE PART A SUSPENSE SHEET FOR CLAIM HIC

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- 121) DENY CODE  
- DEFINITION - INDICATES THE TYPE OF DENIAL LETTER SENT.  
- SOURCE - UB1U-DENIAL-CODE.  
- SIZE - TWO CHARACTERS.
- 122) DENY NCOV-CHARGE  
- DEFINITION - THE AMOUNT OF CHARGES DENIED PAYMENT.  
- SOURCE - UB1U-DENIED-NON-COV-CHARGES.  
- SIZE - MAXIMUM IS 9,999,999.99
- 123) REQUERY CODE  
- DEFINITION - CODE USED TO REQUERY BALTIMORE.  
- SOURCE - UB1Q-REQUERY-CODE.  
- SIZE - ONE CHARACTER.
- 124) PAID DATE  
- DEFINITION - DATE OF THE CHECK.  
- SOURCE - UB1S-PAID-DATE.  
- SIZE - SIX DIGIT DATE.
- 125) BATCH NUM  
- DEFINITION - UNIBILL BATCH NUMBER.  
- SOURCE - UB1S-SSA-BATCH-NO.  
- SIZE - FOUR CHARACTERS.
- 126) PART-B OPEN  
- DEFINITION - A FLAG INDICATING THAT THE CLAIM RECORD IS  
AWAITING A REPLY.  
- SOURCE - UB1R-OPEN-ITEM-IND.  
- SIZE - ONE CHARACTER.
- 127) REPLY DATE  
- DEFINITION - THE DATE THE REPLY WAS PROCESSED.  
- SOURCE - UB1R-REPLY-DATE.  
- SIZE - SIX DIGIT DATE.
- 128) REPLY UPD-DATE  
- DEFINITION - THE DATE THE OUTPATIENT OPEN ITEM WAS  
UPDATED.  
- SOURCE - UB1R-REPLY-UPDATE-DATE.  
- SIZE - SIX DIGIT DATE.
- 129) REPLY UPD-CLERK  
- DEFINITION - THE ID OF THE CLERK THAT UPDATED THE  
OUTPATIENT OPEN ITEM ON SUSPENSE.  
- SOURCE - UB1R-REPLY-UPDATE-CLERK.  
- SIZE - THREE CHARACTERS.
- 130) DISP CODE  
- DEFINITION - CODE ON REPLY RECORDS.  
- SOURCE - UB1R-DISPOSITION-CODE.  
- SIZE - TWO CHARACTERS.



## MEDICARE PART A SUSPENSE SHEET FOR CLAIM HIC

- 131) INCORRECT LAST NAME  
- DEFINITION - THE OLD NAME ON THE CLAIM THAT WAS REPLACED BY THE NEW NAME FROM THE REPLY TRAILER.  
- SOURCE - UB1R-INCORRECT-LAST-NAME.  
- SIZE - ELEVEN CHARACTERS.
- 132) INCORR INIT  
- DEFINITION - THE INCORRECT INITIALS ON THE CLAIM REPLACED BY THE NEW INITIALS FROM REPLY.  
- SOURCE - UB1R-INCORRECT-INITIALS.  
- SIZE - TWO CHARACTERS.
- 133) INCORRECT HIC  
- DEFINITION - THE OLD HIB NUMBER THAT WAS REPLACED BY A NEW NUMBER FROM A 'C' OR 'K' TRAILER.  
- SOURCE - UB1R-INCORRECT-HIB-NO.  
- SIZE - 19 CHARACTERS.
- 134) CORRECT HIC  
- DEFINITION - THE NEW HIB NUMBER FROM THE C OR K TRAILER.  
- SOURCE - UB1R-CORRECT-HIB-NO.  
- SIZE - 19 CHARACTERS.
- 135) CR-BLOOD DED  
- DEFINITION - THE NUMBER OF BLOOD PINTS REMAINING TO BE MET.  
- SOURCE - UB1R-CREDIT-BLOOD-DED-AMT.  
- SIZE - MAXIMUM IS 9,999.99
- 136) QUERY AMT  
- DEFINITION - THE AMOUNT OF CHARGES QUERIED TO BALTIMORE.  
- SOURCE - UB1R-QUERY-AMT.  
- SIZE - MAXIMUM IS 99,999.99
- 137) B-DATES EFF  
- DEFINITION - THE DATE A BENE BECAME ELIGIBLE FOR PART-B BENEFITS.  
- SOURCE - UB1R-B-EFFECTIVE-DATE.  
- SIZE - FOUR DIGIT DATE (YYMM).
- 138) B-DATES TERM  
- DEFINITION - THE DATE A BENE'S PART-B ELIGIBILITY WAS TERMINATED.  
- SOURCE - UB1R-B-TERMINATION-DATE.  
- SIZE - FOUR DIGIT DATE (YYMM).
- 139) B-PRIOR-DATES EFF  
- DEFINITION - THE DATE A BENE BEGAN A PRIOR PERIOD OF ELIGIBILITY FOR PART-B.  
- SOURCE - UB1R-B-PRIOR-EFFECTIVE-DATE.  
- SIZE - FOUR DIGIT DATE (YYMM).



## MEDICARE PART A SUSPENSE SHEET FOR CLAIM HIC

- 
- 140) B-PRIOR-DATES TERM  
- DEFINITION - THE DATE A BENE'S PRIOR ELIGIBILITY FOR PART-B WAS TERMINATED.  
- SOURCE - UB1R-B-PRIOR-TERMINATION-DATE.  
- SIZE - FOUR DIGIT DATE (YYMM).
- 141) B-DED AMT-LEFT  
- DEFINITION - THE AMOUNT OF PART-B CASH DEDUCTIBLE REMAINING TO BE MET.  
- SOURCE - UB1R-B-DED-AMT-LEFT.  
- SIZE - MAXIMUM IS 99,999.99
- 142) B-DED AMOUNT  
- DEFINITION - THE AMOUNT OF PART-B DEDUCTIBLE REMAINING TO BE MET ACCORDING TO HCFA'S RECORDS.  
- SOURCE - UB1R-B-DED-AMT.  
- SIZE - MAXIMUM IS 99,999.99
- 143) B-DED MET  
- DEFINITION - CODE INDICATING THE BENE'S PART-B DEDUCTIBLE HAS BEEN MET FOR THE CURRENT YEAR.  
                  '1' - DEDUCTIBLE HAS BEEN MET.  
                  '2' - DEDUCTIBLE HAS NOT BEEN MET.  
- SOURCE - UB1R-B-DED-AMT-MET-CODE.  
- SIZE - ONE CHARACTER.
- 144) B-BLD DED  
- DEFINITION - NUMBER OF PART-B BLOOD DEDUCTIBLE PINTS REMAINING.  
- SOURCE - UB1R-B-BLOOD-DED-PINTS.  
- SIZE - MAXIMUM IS 9.
- 145) B-BLD DED-MET  
- DEFINITION - FLAG INDICATING WHETHER THE BENE'S PART-B BLOOD DEDUCTIBLE HAS BEEN MET FOR THE CURRENT YEAR.  
- SOURCE - UB1R-B-BLOOD-DED-MET-IND.  
- SIZE - ONE CHARACTER.
- 146) H-TRLR CORRECT-NAME  
- DEFINITION - THE CORRECT NAME AS ON THE TRAILER.  
- SOURCE - UB1R-H-TRLR-CORRECT-NAME.  
- SIZE - 25 CHARACTERS.
- 147) S-TRLR ESRD  
- DEFINITION - ESRD CODE ON THE REPLY S TRAILER.  
- SOURCE - UB1R-S-TRLR-ESRD-CODE.  
- SIZE - TWO CHARACTERS.





## MEDICARE PART A SUSPENSE SHEET FOR CLAIM HIC

- 
- 148) U-TRLR DEATH  
- DEFINITION - DATE OF DEATH.  
- SOURCE - UB1R-U-TRLR-DATE-OF-DEATH.  
- SIZE - SIX DIGIT DATE.
- 150) Z-TR HOS  
- DEFINITION - FLAG INDICATING THAT A Z-TRAILER WAS RECEIVED.  
- SOURCE - UB1R-Z-TRLR-HOSPICE.  
- SIZE - ONE CHARACTER.
- 151) HIV-DRUG-AMT  
- DEFINITION - AMOUNT DISPLAYED FOR HIV DRUG.  
- SOURCE - UB1P-HOME-IV-DRUG-AMT.  
- SIZE - (99999.99)
- 152) HIV-THRPY-AMT  
- DEFINITION - AMOUNT DISPLAYED FOR AMOUNT HIV THERAPY.  
- SOURCE - UB1P-HOME-IV-THERAPY-AMT.  
- SIZE - (99999.99)
- 153) AMOUNT-PAID-AFTER-CAP  
- DEFINITION - AMOUNT PAID AT 100% AFTER CAP IS MET.  
- SOURCE - UB1P-AMT-PAID-AFTER-CAP.  
- SIZE - (99999.99)
- 154) CERTIFICATION INDICATOR  
- DEFINITION - CERTIFICATION INIDCATOR FOR MAMMOGRAPHY.  
- SOURCE - UB1P-CERTIFICATION-IND.  
- SIZE - X. ONE CHARACTER
- 155) RESPITE HOURS  
- DEFINITION - NUMBER OF RESPITE HOURS DISPLAYED.  
- SOURCE - UB1R-RESPITE-HOURS  
- SIZE - MAXIMUM IS 999.
- 156) CAP INDICATOR.  
- DEFINITION - INDICATOR USED TO DISPLAY WHEN CAP IS MET.  
- SOURCE - UB1R-B-CAP-MET-IND.  
- SIZE - X. ONE CHARACTER



## MEDICARE PART A SUSPENSE SHEET FOR CLAIM HIC

- 
- 157) CAP AMOUNT  
- DEFINITION - AMOUNT OF CAP DISPLAYED AFTER CAP IS MET  
- SOURCE - UB1R-B-CAP-AMT.  
- SIZE - 99999.99.
- 158) DRUG DEDUCTIBLE AMOUNT  
- DEFINITION - AMOUNT OF DRUG DEDUCTIBLE.  
- SOURCE - UB1R-B-DRUG-DED-AMT.  
- SIZE - 99999.99.
- 159) RESPITE ELIGIBILITY DATE  
- DEFINITION - EARLIEST DATE FOR RESPITE ELIGIBILITY  
- SOURCE - UB1R-E-TRLR-RESPITE-ELIG-DATE  
- SIZE - 999999.
- 160) TRANSPLANT DATE  
- DEFINITION - DATE OF TRANSPLANT  
- SOURCE - UB1R-HOME-IV-DRUG-AMT.  
- SIZE - (999999)
- 161) DATE OF DEATH  
- DEFINITION - DATE USED TO DISPLAY DEATH OF PATIENT.  
- SOURCE - UB1R-U-TRLR-DATE-OF-DEATH.  
- SIZE - (999999)
- 162) MAMMOGRAPHY DATE  
- DEFINITION - DATE OF MAMMOGRAPHY  
- SOURCE - UB1R-W-TRLR-MAMMOGRAPHY-DATE.  
- SIZE - (999999)

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## MEDICARE PART A SUSPENSE SHEET FOR CLAIM HIC

- 
- 163) U-TRLR DEATH  
- DEFINITION - DATE OF DEATH.  
- SOURCE - UB1R-U-TRLR-DATE-OF-DEATH.  
- SIZE - SIX DIGIT DATE.
- 165) Z-TR HOS  
- DEFINITION - FLAG INDICATING THAT A Z-TRAILER WAS RECEIVED.  
- SOURCE - UB1R-Z-TRLR-HOSPICE.  
- SIZE - ONE CHARACTER.
- 166) A-DATES EFF  
- DEFINITION - THE DATE A BENE BECAME ELIGIBLE FOR PART-A BENEFITS.  
- SOURCE - UB1R-A-EFFECTIVE-DATE.  
- SIZE - FOUR DIGIT DATE (YYMM).
- 167) A-DATES TERM  
- DEFINITION - THE DATE A BENE'S PART-A ELIGIBILITY ENDED.  
- SOURCE - UB1R-A-TERMINATION-DATE.  
- SIZE - FOUR DIGIT DATE (YYMM).
- 168) A-PRIOR-DATES EFF  
- DEFINITION - THE DATE A BENE BEGAN A PRIOR PERIOD OF ELIGIBILITY FOR PART-A.  
- SOURCE - UB1R-A-PRIOR-EFFECTIVE-DATE.  
- SIZE - FOUR DIGIT DATE (YYMM).
- 169) A-PRIOR-DATES TERM  
- DEFINITION - THE DATE A BENE'S PRIOR ELIGIBILITY FOR PART-A WAS TERMINATED.  
- SOURCE - UB1R-A-PRIOR-TERMINATION-DATE.  
- SIZE - FOUR DIGIT DATE (YYMM).
- 170) PART-A-DAYS-LEFT PSYCH  
- DEFINITION - NUMBER OF DAYS REMAINING FOR PSYCHIATRIC TREATMENT UNDER MED-A.  
- SOURCE - UB1R-PSYCH-DAYS-LEFT.  
- SIZE - MAXIMUM IS 999.
- 171) PART-A-DAYS-LEFT SNF  
- DEFINITION - NUMBER OF SNF DAYS REMAINING.  
- SOURCE - UB1R-SNF-DAYS-LEFT.  
- SIZE - MAXIMUM IS 999.



## MEDICARE PART A SUSPENSE SHEET FOR CLAIM HIC

- 
- 172) PART-A-DAYS-LEFT S-COINS  
- DEFINITION - NUMBER OF COINSURANCE DAYS LEFT.  
- SOURCE - UB1R-SNF-CO-INS-DAYS-LEFT.  
- SIZE - MAXIMUM IS 999.
- 173) RPLY-A-CSH-DED-MET  
- DEFINITION - FLAG INDICATING IF CASH DEDUCTIBLE WAS MET FROM THE REPLY.  
- SOURCE - UB1R-REPLY-A-CASH-DED-MET.  
- SIZE - 1 CHARACTER
- 174) DED-NOT-TAKEN  
- DEFINITION - FLAG INDICATING IF DEDUCTIBLE WAS TAKEN.  
- SOURCE - UB1S-DEDUCT-NO-TAKEN.  
- SIZE - 1 CHARACTER
- 175) TRANS FLAG  
- DEFINITION - TRANSITION FLAG  
- SOURCE - UB1S-TRANSITION-FLAG.  
- SIZE - 1 CHARACTER
- 176) A-CSH-DED-MET PRIOR  
- DEFINITION - FLAG INDICATING IF PRIOR CASH DEDUCTIBLE HAS BEEN MET  
- SOURCE - UB1S-A-PRIOR-CASH-DED-MET.  
- SIZE - 1 CHARACTER.
- 177) A-CSH-DED-MET CURRENT  
- DEFINITION - FLAG INDICATING IF CURRENT CASH DEDUCTIBLE HAS BEEN MET  
- SOURCE - UB1S-A-CURR-CASH-DED-MET.  
- SIZE - 1 CHARACTER.
- 178) A-DED-MET-DATE-IND  
- DEFINITION - FLAG INDICATING DEDUCTIBLE MET DATE  
- SOURCE - UB1S-A-DED-MET-DATE-IND.  
- SIZE - 1 CHARACTER.
- 179) H-H ELIG  
- DEFINITION - BENE'S HOME HEALTH ELIGIBILITY.  
- SOURCE - UB1R-HOME-HEALTH-ELIGIBILITY.  
- SIZE - TWO CHARACTERS.
- 180) PSYCH EXP-CD  
- DEFINITION - THE PSYCH EXP CODE.  
- SOURCE - UB1R-PSYCH-EXP-CODE.  
- SIZE - MAXIMUM IS 9.
- 181) Y-TRLR DATE  
- DEFINITION - REPLY Y TRAILER EFFECTIVE DATE.  
- SOURCE - UB1R-Y-TRLR-EFFECTIVE-DATE.  
- SIZE - SIX DIGIT DATE.





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MEDICARE PART A SUSPENSE SHEET FOR CLAIM HIC  
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- 184) PRIOR STAY-IND  
- DEFINITION - CODE TO IDENTIFY IF A PRIOR STAY OCCURED.  
- SOURCE - UB1R-PRIOR-STAY-IND.  
- SIZE - ONE CHARACTER.
- 185) PSYCH-SUSP-UPDATE-IND  
- DEFINITION - PSYCHIATRIC SUSPENSE UPDATE FLAG.  
- SOURCE - UB1R-PSYCH-SUSP-UPDATE-IND  
- SIZE - ONE CHARACTER.
- 186) C-K TRLR  
- DEFINITION - FLAG FOR C-K TRAILER.  
- SOURCE - UB1R-C-K-TRLR-CODE.  
- SIZE - ONE CHARACTER.
- 188) PART-A-DEDUCT AMOUNT  
- DEFINITION - THE INPATIENT DEDUCTIBLE AMOUNT ON THE  
QUERY RECORD.  
- SOURCE - UB1R-A-DED-AMT-LEFT.  
- SIZE - MAXIMUM IS 99,999.99
- 189) PART-A-DEDUCT PTNTS  
- DEFINITION - THE INPATIENT AND SNF BLOOD DEDUCTIBLE  
PINTS ON THE QUERY RECORD.  
- SOURCE - UB1R-A-BLOOD-DED-PINTS-LEFT.  
- SIZE - MAXIMUM IS 9.
- 189.1) CWF7-IND  
- DEFINITION - THE CWF ACTION CODE 7 INDICATOR. VALID  
VALUE IS A BLANK OR 'C'.  
- SOURCE - UB1S-CWF7-IND.  
- SIZE - MAXIMUM IS 1.
- 190) MESSAGES-TO-USERS:  
- DEFINITION - COMMENT MESSAGE TO THE USER.  
- SOURCE - W-MESSAGE-TO-USERS-L - CLAIM OVERRIDDEN  
AT ENTRY.  
W-MESSAGE-TO-USERS-M - DUP SUSPENSE SHEET.  
W-MESSAGE-TO-USERS-R - MANUALLY REQUESTED.  
- SIZE - L = 25 CHARACTERS  
M = 18 CHARACTERS  
R = 18 CHARACTERS



## MEDICARE PART A SUSPENSE SHEET FOR CLAIM HIC

- 
- 191) ERROR-CODE  
- DEFINITION - IDENTIFIES THE EDIT THE CLAIM FAILED  
IN THE DAILY CYCLE.  
- SOURCE - UB1S-ERROR-CODE.  
- SIZE - EIGHT CHARACTERS.
- 192) ERROR-DESCRIPTION  
- DEFINITION - DESCRIPTION OF ERROR BASED ON ERROR CODE.  
- SOURCE - ERR-DESC-MESSAGE - ON ERR-DESC-FILE.  
- SIZE - 53 CHARACTERS.
- 193) ERROR-CONTENTS  
- DEFINITION - HOLDS DATA USED TO DETERMINE THE CAUSE OF  
THE ERROR.  
- SOURCE - UB1S-ERROR-CONTENTS.  
- SIZE - TWELVE CHARACTERS.
- 194) NO-EDIT-CODE  
- DEFINITION - GIVES THE SYSTEM THE ABILITY TO OVERRIDE AN  
ERROR AND BYPASS THE EDIT.  
- SOURCE - UB1U-NO-EDIT-CODE.  
- SIZE - THREE CHARACTERS.
- 195) PATIENT-HISTORY ICN  
- DEFINITION - THE ICN ASSIGNED TO THE CLAIM.  
- SOURCE - BH1C-ICN.  
- SIZE - MAXIMUM IS 23 CHARACTERS
- 196) PATIENT-HISTORY CLAIM-TYPE  
- DEFINITION - CODE IDENTIFYING THE TYPE OF RECORD ON THE  
BENE HISTORY FILE.  
- SOURCE - BH1C-TYPE-OF-BILL.  
- SIZE - THREE CHARACTERS.
- 197) PATIENT-HISTORY PROV-NO  
- DEFINITION - PROVIDER NUMBER. ASSIGNED TO THE PROVIDER FOR  
IDENTIFICATION PURPOSES. THE FIRST 2 POSITIONS  
ARE THE STATE CODE (AR IS '04'). THE LAST 4  
POSITIONS DESCRIBE THE TYPE OF PROVIDER.  
- SOURCE - BH1C-PROVIDER-NO.  
- SIZE - 10 DIGITS.
- 198) PATIENT-HISTORY CV-DAYS  
- DEFINITION - COVERED DAYS.  
- SOURCE - BH1I-COVERED-DAYS.  
- SIZE - THREE DIGITS.
- 199) PATIENT-HISTORY NCOV-DAYS  
- DEFINITION - NON-COVERED DAYS.  
- SOURCE - BH1I-NON-COVERED-DAYS.  
- SIZE - THREE DIGITS.



## MEDICARE PART A SUSPENSE SHEET FOR CLAIM HIC

- 
- 200) PATIENT-HISTORY BLOOD-PNTS-DED  
- DEFINITION - PINTS OF BLOOD DEDUCTIBLE  
- SOURCE - BH1I-BLOOD-DED-PINTS.  
- SIZE - ONE DIGIT.
- 201) PATIENT-HISTORY DED-AMT  
- DEFINITION - AMOUNT OF DEDUCTIBLE  
- SOURCE - INPATIENT CLAIM: BH1I-INPATIENT-DED-AMT.  
OUTPATIENT CLAIM: BH1O-B-DED-CHARGES.  
HOME HEALTH CLAIM: BH1H-B-DED-CHARGES.  
- SIZE - UP TO 99,999.99.
- 202) PATIENT-HISTORY ADMIT DATE  
- DEFINITION - DATE OF ADMISSION  
- SOURCE - BH1C-ADMISSION-DATE.  
- SIZE - SIX DIGIT DATE.
- 203) PATIENT-HISTORY STMT-FROM  
- DEFINITION - THE BEGINNING SERVICE DATE OF THE BILL.  
- SOURCE - BH1C-STMT-COVERS-FROM.  
- SIZE - SIX DIGIT DATE.
- 204) PATIENT-HISTORY STMT-THRU  
- DEFINITION - THE ENDING SERVICE DATE OF THE BILL.  
- SOURCE - BH1C-STMT-COVERS-THRU.  
- SIZE - SIX DIGIT DATE.
- 205) PATIENT-HISTORY PROCESS  
- DEFINITION - THE DATE THE CLAIM WAS APPROVED FOR PAYMENT  
AND ADDED TO THE BENE HISTORY FILE.  
- SOURCE - BH1C-PROCESS-DATE.  
- SIZE - SIX DIGIT DATE.
- 206) PATIENT-HISTORY PAID-ENTRY  
- DEFINITION - THE DATE THAT THE CLAIM WAS PAID.  
- SOURCE - BH1C-PAID-DATE.  
- SIZE - SIX DIGIT DATE.
- 207) PATIENT-HISTORY DENY  
- DEFINITION - CODE INDICATING THE TYPE OF DENIAL LETTER  
TO BE SENT TO THE PROVIDER.  
- SOURCE - BH1C-DENIAL-CODE.  
- SIZE - TWO CHARACTERS.
- 208) PATIENT-HISTORY TOTAL CHARGE  
- DEFINITION - THE TOTAL CHARGES ON THE BILL.  
- SOURCE - BH1C-TOTAL-CHARGES.  
- SIZE - MAXIMUM IS 9,999,999.99



## MEDICARE PART A SUSPENSE SHEET FOR CLAIM HIC

- 209) CWF-ERR-CD  
- DEFINITION - IDENTIFIES THE CWF EDIT THE CLAIM FAILED  
IN THE DAILY CYCLE.  
- SOURCE - UB1C-CWF-ERROR-CODE  
- SIZE - FOUR CHARACTERS.

\*\*\*\*\* THE FOLLOWING FIELDS WILL APPEAR ON REPORT \*\*\*\*\*  
\*\*\*\*\* M70065 WHEN THE CWFA-RECORD-D EQUAL 'HUIP' \*\*\*\*\*

- 210) CWFA TRLR7 CODE  
- DEFINITION - IDENTIFIES THE TRAILER CODE FOR TRLR7  
- SOURCE - CWFA-TRLR7-CODE  
- SIZE - 2 CHARACTERS.
- 211) CWFA TRLR7 CASH DED SUBMIT  
- DEFINITION - IDENTIFIES THE CASH DEDUCTIBLE SUBMITTED  
FOR TRAILER 7.  
- SOURCE - CWFA-TRLR7-CASH-DED-SUBMIT  
- SIZE - 9(4)V99.
- 212) CWFA TRLR7 CASH DED APPLIED  
- DEFINITION - IDENTIFIES THE CASH DEDUCTIBLE APPLIED  
FOR TRAILER 7.  
- SOURCE - CWFA-TRLR7-CASH-DED-APPLY  
- SIZE - 9(4)V99.
- 213) CWFA TRLR7 FULL DAY SUBMIT  
- DEFINITION - NUMBER OF FULL DAYS SUBMITTED FOR TRLR7  
- SOURCE - CWFA-TRLR7-FULL-DAY-SUBMIT  
- SIZE - 999
- 214) CWFA TRLR7 FULL DAY APPLY  
- DEFINITION - NUMBER OF FULL DAYS APPLIED FOR TRLR7  
- SOURCE - CWFA-TRLR7-FULL-DAY-APPLY  
- SIZE - 999
- 215) CWFA TRLR7 1ST COIN SUBMIT  
- DEFINITION - CWFA FIRST COINSURANCE AMOUNT SUBMITTED  
- SOURCE - CWFA-TRLR7-1ST-COIN-SUBMIT  
- SIZE - 99
- 216) CWFA TRLR7 1ST COIN APPLY  
- DEFINITION - CWFA FIRST COINSURANCE APPLIED FOR TRLR7  
- SOURCE - CWFA-TRLR7-1ST-COIN-APPLY  
- SIZE - 99
- 217) CWFA TRLR7 2ND COIN SUBMIT  
- DEFINITION - CWFA SECOND COINSURANCE SUBMITTED FOR TRLR7  
- SOURCE - CWFA-TRLR7-2ND-COIN-SUBMIT  
- SIZE - 99





## MEDICARE PART A SUSPENSE SHEET FOR CLAIM HIC

- 
- 218) CWFA TRLR7 2ND COIN APPLY  
- DEFINITION - CWFA SECOND COINSURANCE APPLIED FOR TRLR7  
- SOURCE - CWFA-TRLR7-2ND-COIN-APPLY  
- SIZE - 99
- 219) CWFA TRLR7 1ST LTR SUBMIT  
- DEFINITION - CWFA FIRST LTR SUBMITTED FOR TRLR7  
- SOURCE - CWFA-TRLR7-1ST-LTR-SUBMIT  
- SIZE - 99
- 220) CWFA TRLR7 1ST LTR APPLY  
- DEFINITION - CWFA FIRST LTR APPLIED FOR TRLR7  
- SOURCE - CWFA-TRLR7-1ST-LTR-APPLY  
- SIZE - 99
- 221) CWFA TRLR7 2ND LTR SUBMIT  
- DEFINITION - CWFA SECOND LTR SUBMITTED FOR TRLR7  
- SOURCE - CWFA-TRLR7-2ND-LTR-SUBMIT  
- SIZE - 99
- 222) CWFA TRLR7 2ND LTR APPLY  
- DEFINITION - CWFA SECOND LTR APPLIED FOR TRLR7  
- SOURCE - CWFA-TRLR7-2ND-LTR-APPLY  
- SIZE - 99
- 223) CWFA TRLR7 UTIL DAY SUBMIT  
- DEFINITION - DAYS OF CARE SUBMITTED TO MEDICARE  
- UTILIZATION  
- SOURCE - CWFA-TRLR-UTIL-DAY-SUBMIT  
- SIZE - 999
- 224) CWFA TRLR7 UTIL DAY APPLY  
- DEFINITION - DAYS OF CARE APPLIED TO MEDICARE  
- UTILIZATION  
- SOURCE - CWFA-TRLR-UTIL-DAY-APPLY  
- SIZE - 999

INTENTIONALLY BLANK FOR FUTURE USE!!!



## MEDICARE PART A SUSPENSE SHEET FOR CLAIM HIC

\*\*\*\*\* THE FOLLOWING FIELDS WILL APPEAR ON REPORT \*\*\*\*\*  
\*\*\*\*\* M70065 WHEN THE CWFA-RECORD-D EQUAL 'HUOP' \*\*\*\*\*

- 225) CWFA TRLR7 CASH DED SUBMIT OP  
- DEFINITION - IDENTIFIES THE CASH DEDUCTIBLE SUBMITTED  
- FOR TRAILER 7 WHEN TOB = OUTPATIENT  
- SOURCE - CWFA-TRLR7-CASH-DED-SUBMIT-OP  
- SIZE - 9(3)V99.
- 226) CWFA TRLR7 CASH DED APPLIED OP  
- DEFINITION - IDENTIFIES THE CASH DEDUCTIBLE APPLIED  
- FOR TRAILER 7 WHEN TOB = OUTPATIENT.  
- SOURCE - CWFA-TRLR7-CASH-DED-APPLY-OP  
- SIZE - 9(3)V99.
- 227) CWFA TRLR7 COIN SUBMIT OP  
- DEFINITION - AMOUNT OF COINSURANCE SUBMITTED FOR MEDICARE  
- UTILIZATION FOR AN OUTPATIENT TOB  
- SOURCE - CWFA-TRLR7-COIN-SUBMIT-OP  
- SIZE - 9(5)V99
- 228) CWFA TRLR7 COIN APPLY  
- DEFINITION - AMOUNT OF COINSURANCE APPLIED FOR MEDICARE  
- UTILIZATION FOR AN OUTPATIENT TOB  
- SOURCE - CWFA-TRLR7-COIN-APPLY-OP  
- SIZE - 9(5)V99
- 229) CWFA TRLR7 LAST SERVICE  
- DEFINITION - LAST SERVICE DATE ACCEPTED FOR MEDICARE  
- UTILIZATION.  
- SOURCE - CWFA-TRLR7-LAST-SERVICE  
- SIZE - 9(6)
- 230) CWFA TRLR7 REV LAST SERVICE  
- DEFINITION - REVISED LAST SERVICE DATE FOR MEDICARE  
- UTILIZATION.  
- SOURCE - CWFA-TRLR7-REV-LAST-SERVICE  
- SIZE - 9(6)
- 231) CWFA TRLR7 HH NEW RIC  
- DEFINITION - HOME HEALTH NEW RIC TO CWFA TRLR7.  
- SOURCE - CWFA-TRLR7-HH-NEW-RIC  
- SIZE - PIC X
- 232) CWFA TRLR7 PSYCH EXP SUBMIT  
- DEFINITION - AMOUNT OF PSYCH EXPENSE SUBMITTED FOR TRLR7  
- SOURCE - CWFA-TRLR7-PSYCH-EXP-SUBMIT  
- SIZE - 9(5)V99
- 233) CWFA TRLR7 PSYCH EXP APPLY  
- DEFINITION - AMOUNT OF PSYCH EXPENSE APPLIED FOR TRLR7  
- SOURCE - CWFA-TRLR7-PSYCH-EXP-APPLIED  
- SIZE - 9(5)V99



## MEDICARE PART A SUSPENSE SHEET FOR CLAIM HIC

\*\*\*\*\* THE FOLLOWING FIELDS WILL APPEAR ON REPORT \*\*\*\*\*  
\*\*\*\*\* IF CWFA-TRLR8-CONSISTENCY-REJECT IS NOT \*\*\*\*\*  
\*\*\*\*\* EQUAL TO SPACES. \*\*\*\*\*

- 234) CWFA TRLR8 CODE  
- DEFINITION - IDENTIFIES THE TRAILER CODE FOR CWFA TRLR8  
- SOURCE - CWFA-TRLR8-CODE  
- SIZE - 2 CHARACTERS.
- 235) CWFA TRLR8 1ST ERROR  
- DEFINITION - IDENTIFIES THE FIRST ERROR UNDER TRLR8  
- SOURCE - CWFA-TRLR8-1ST-ERROR  
- SIZE - 2 CHARACTERS.
- 236) CWFA TRLR8 2ND ERROR  
- DEFINITION - IDENTIFIES THE SECOND ERROR UNDER TRLR8  
- SOURCE - CWFA-TRLR8-2ND-ERROR  
- SIZE - 2 CHARACTERS.
- 237) CWFA TRLR8 3RD ERROR  
- DEFINITION - IDENTIFIES THE THIRD ERROR UNDER TRLR8  
- SOURCE - CWFA-TRLR8-3RD-ERROR  
- SIZE - 2 CHARACTERS.
- 238) CWFA TRLR8 3RD ERROR  
- DEFINITION - IDENTIFIES THE THIRD ERROR UNDER TRLR8  
- SOURCE - CWFA-TRLR8-3RD-ERROR  
- SIZE - 2 CHARACTERS.
- 239) CWFA TRLR8 4TH ERROR  
- DEFINITION - IDENTIFIES THE FOURTH ERROR UNDER TRLR8  
- SOURCE - CWFA-TRLR8-4TH-ERROR  
- SIZE - 2 CHARACTERS.

\*\*\*\*\* THE FOLLOWING FIELDS WILL APPEAR ON REPORT \*\*\*\*\*  
\*\*\*\*\* IF CWFA-TRLR9-SPELL-DATA IS NOT EQUAL TO \*\*\*\*\*  
\*\*\*\*\* SPACES. \*\*\*\*\*

- 240) CWFA TRLR9 CODE  
- DEFINITION - IDENTIFIES THE TRAILER CODE FOR TRLR9  
- SOURCE - CWFA-TRLR9-CODE  
- SIZE - 2 CHARACTERS.
- 241) CWFA TRLR9 LTR DAYS  
- DEFINITION - IDENTIFIES THE NUMBER OF LTR DAYS FOR TRLR9  
- SOURCE - CWFA-TRLR9-LTR-DAYS  
- SIZE - 2 CHARACTERS.



## MEDICARE PART A SUSPENSE SHEET FOR CLAIM HIC

- 
- 242) CWFA TRLR9 PSYCH DAYS  
- DEFINITION - IDENTIFIES THE NUMBER OF PSYCHIATRIC DAYS  
- SOURCE - CWFA-TRLR9-PSYCH-DAYSM  
- SIZE - 3 CHARACTERS.
- 243) CWFA TRLR9 FULL DAYS  
- DEFINITION - IDENTIFIES THE NUMBER OF FULL DAYS  
- SOURCE - CWFA-TRLR9-FULL-DAYS  
- SIZE - 2 CHARACTERS.
- 244) CWFA TRLR9 COIN DAYS  
- DEFINITION - IDENTIFIES THE COINSURANCE DAYS  
- SOURCE - CWFA-TRLR9-COIN-DAYS  
- SIZE - 2 CHARACTERS.
- 245) CWFA TRLR9 SNF FULL  
- DEFINITION - IDENTIFIES THE FULL DAYS FOR A SNF CLAIM  
- SOURCE - CWFA-TRLR9-SNF-FULL  
- SIZE - 2 CHARACTERS.
- 246) CWFA TRLR9 SNF COIN  
- DEFINITION - IDENTIFIES THE COINSURANCE DAYS FOR A SNF CLAIM.  
- SOURCE - CWFA-TRLR9-SNF-COIN  
- SIZE - 2 CHARACTERS.
- 247) CWFA TRLR9 INPAT-DEDUCT  
- DEFINITION - IDENTIFIES THE AMOUNT OF DEDUCTIBLE FOR A INPATIENT CLAIM  
- SOURCE - CWFA-TRLR9-INPAT-DEDUCT  
- SIZE - PIC 9(4)V99
- 248) CWFA TRLR9 BLOOD DED PINTS  
- DEFINITION - IDENTIFIES THE NUMBER OF PINTS OF BLOOD USE AS A DEDUCTIBLE.  
- SOURCE - CWFA-TRLR9-INPAT-DEDUCT  
- SIZE - PIC 9(4)V99
- 249) CWFA TRLR9 EARLIEST ACTION  
- DEFINITION - IDENTIFIES THE EARLIEST ACTION DATE TO PROCESS A BILL.  
- SOURCE - CWFA-TRLR9-EARLIEST-ACTION  
- SIZE - PIC 9(6)
- 250) CWFA TRLR9 LATEST ACTION  
- DEFINITION - IDENTIFIES THE LATEST ACTION DATE TO PROCESS A BILL.  
- SOURCE - CWFA-TRLR9-LATEST-ACTION  
- SIZE - PIC 9(6)
- 251) CWFA TRLR9 INTERIM IND  
- DEFINITION - IDENTIFIES THE INTERIMEDIARY INDICATOR FOR A CLAIM.  
- SOURCE - CWFA-TRLR9-INTERIM-IND  
- SIZE - PIC 9





## MEDICARE PART A SUSPENSE SHEET FOR CLAIM HIC

\*\*\*\*\* THE FOLLOWING FIELDS WILL APPEAR ON REPORT \*\*\*\*\*  
\*\*\*\*\* IF CWFA-TRLR14-CATASTROPHIC NOT EQUAL TO \*\*\*\*\*  
\*\*\*\*\* SPACES. \*\*\*\*\*

- 252) CWFA TRLR14 CODE  
- DEFINITION - IDENTIFIES THE TRAILER CODE FOR TRLR14  
- SOURCE - CWFA-TRLR14-CODE  
- SIZE - 2 CHARACTERS.
- 253) CWFA TRLR14 PSYCH DAYS  
- DEFINITION - IDENTIFIES THE PSYCHIATRIC DAYS FOR TRLR14.  
- SOURCE - CWFA-TRLR14-PSYCH-DAYS  
- SIZE - 3 CHARACTERS.
- 254) CWFA TRLR14 DISCHARGE DATE  
- DEFINITION - IDENTIFIES THE DISCHARGE DATE FOR TRLR14 CLAIM  
- SOURCE - CWFA-TRLR14-DISCHARGE-DATE  
- SIZE - 6 CHARACTERS.
- 255) CWFA TRLR14 INTERIM DATE IND  
- DEFINITION - INDICATOR REPRESENTING THE INTERIM DATE FOR A  
- TRLR14.  
- SOURCE - CWFA-TRLR14-INTERIM-DATE-IND  
- SIZE - 1 CHARACTERS.
- 256) CWFA TRLR14 PRE ENT PSYCH  
- DEFINITION - CWFA PRE ENTITLEMENT PSYCH INDICATOR  
- SOURCE - CWFA-TRLR14-PRE-ENT-PSYCH  
- SIZE - 1 CHARACTERS.
- 257) CWFA TRLR14 TRAILER YEAR  
- DEFINITION - YEAR OF THE TRLR14 DATE  
- SOURCE - CWFA-TRLR14-TRAILER-YEAR  
- SIZE - 2 CHARACTERS.
- 258) CWFA TRLR14 INP DED MET  
- DEFINITION - INDICATOR SHOWING THE DEDUCTIBLE TO BE MET FOR  
A INPATIENT CLAIM.  
- SOURCE - CWFA-TRLR14-INP-DED-MET  
- SIZE - 1 CHARACTERS.
- 259) CWFA TRLR14 PARTA BLOOD  
- DEFINITION - THE NUMBER OF PARTA BLOOD PINTS OR UNITS OF PACKED  
RED BLOOD CELLS FURNISHED FOR WHICH THE PATIENT IS  
RESPONSIBLE.  
- SOURCE - CWFA-TRLR14-PARTA-BLOOD  
- SIZE - 1 CHARACTERS.
- 260) CWFA TRLR14 C S IND  
- DEFINITION - CWFA CHRISTIAN SCIENCE INDICATOR FOR TRLR14  
- SOURCE - CWFA-TRLR14-C-S-INDLOOD  
- SIZE - 1 CHARACTERS.



## MEDICARE PART A SUSPENSE SHEET FOR CLAIM HIC

- 
- 261) CWFA TRLR14 SNF COINSURANCE DAYS  
- DEFINITION - NUMBER OF SNF COINSURANCE DAYS  
- SOURCE - CWFA-TRLR14-SNF-COIN-DAYS  
- SIZE - 2 CHARACTERS.
- 262) CWFA TRLR14 SNF FULL DAYS  
- DEFINITION - NUMBER OF SNF FULL DAYS  
- SOURCE - CWFA-TRLR14-SNF-FULL-DAYS  
- SIZE - 2 CHARACTERS.
- 263) CWFA TRLR14 EARLY FROM DATE  
- DEFINITION - EARLIEST DATE SERVICE CAN BEGIN  
- SOURCE - CWFA-TRLR14-EARLY-FROM-DATE  
- SIZE - 6 CHARACTERS.
- 264) CWFA TRLR14 EARLY THRU DATE  
- DEFINITION - EARLIEST DATE SERVICE CAN BE FINISHED  
- SOURCE - CWFA-TRLR14-EARLY-THRU-DATE  
- SIZE - 6 CHARACTERS.
- 265) CWFA TRLR14 INTERMEDIARY  
- DEFINITION - CWFA TRLR14 INTERMEDIARY NUMBER  
- SOURCE - CWFA-TRLR14-INTERMEDIARY  
- SIZE - 5 CHARACTERS.
- 266) CWFA TRLR14 ADMIT DATE  
- DEFINITION - CWFA TRLR14 ADMISSION DATE  
- SOURCE - CWFA-TRLR14-ADMIT-DATE  
- SIZE - 6 CHARACTERS.
- 267) CWFA TRLR14 FROM DATE  
- DEFINITION - THE DATE WHICH MEDICARE SERVICE BEGIN  
- SOURCE - CWFA-TRLR14-FROM-DATE  
- SIZE - 6 CHARACTERS.
- 268) CWFA TRLR14 THRU DATE  
- DEFINITION - THE DATE WHICH MEDICARE SERVICE ENDED  
- SOURCE - CWFA-TRLR14-THRU-DATE  
- SIZE - 6 CHARACTERS.
- 269) CWFA TRLR14 INTERIM IND  
- DEFINITION - THE INDICATOR ILLUSTRATING THE INTERMEDIARY  
- SOURCE - CWFA-TRLR14-INTERIM-IND  
- SIZE - 1 CHARACTERS.



## MEDICARE PART A SUSPENSE SHEET FOR CLAIM HIC

- 
- 270) CWFA TRLR14 DED APPLIED
- DEFINITION - THE AMOUNT OF DEDUCTIBLE APPLIED TOWARD THE HISTORY OF THE CLAIM AFTER ISSUING MEDICARE SERVICES.
  - SOURCE - CWFA-TRLR14-DED-APPLIED
  - SIZE - PIC 9(5)V99
- 271) CWFA TRLR14 DED REMAIN
- DEFINITION - THE AMOUNT OF DEDUCTIBLE REMAINING AFTER SERVICES HAVE BEEN ISSUED.
  - SOURCE - CWFA-TRLR14-DED-REMAIN
  - SIZE - PIC 9(5)V99









## Appendix K

### Hospital and FI Reported HIC Numbers Compared to Enrollment Data Base in the Pretest

	Source of Case					
	Participating Hospital		Fiscal Intermediary		Total cases*	
	Number	Percent	Number	Percent	Number	Percent
Matched on HIC	327	90.3	845	94.4	1,172	93.2
Did not match on HIC, matched on name	30	8.3	43	4.8	73	5.8
Did not match on HIC or name	5	1.4	7	0.8	12	1.0
Total Cases	362		895		1,257	

\* The number of cases exceeds the number of persons surveyed. To determine if respondents could be located from data submitted by the fiscal intermediary, a number of persons were contacted by telephone, but did not complete the entire survey.







## Appendix L

### Characteristics of Hospitals Identified Through Fi Claims in the Pretest

	Wisconsin		Arkansas		Illinois		Nevada		North Carolina	
Total Hospitals	68		42		20		13		98	
<u>Characteristics</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
<u>Total Beds</u>										
under 100 beds	31	45%	22	53%	11	55%	4	31%	36	37%
101-200 beds	16	24%	11	26%	1	5%	3	23%	29	30%
201-300 beds	10	15%	3	7%	4	20%	1	8%	13	13%
301-400 beds	6	9%	5	12%	1	5%	2	15%	6	6%
401 and over	5	7%	1	2%	3	15%	3	23%	14	14%
Urban	36	53%	9	21%	10	50%	10	77%	40	41%
Rural	32	47%	33	79%	10	50%	3	23%	58	59%
<u>Ownership</u>										
Non profit	46	68%	17	40%	9	45%	2	15%	58	59%
Church	21	31%	7	17%	2	10%	2	15%	2	2%
Hospital district	0	0	0	0	2	10%	1	8%	7	7%
For-profit	0	0	7	17%	6	30%	4	31%	9	9%
Government	1	1%	11	26%	1	5%	4	31%	22	23%
<u>Service Type</u>										
General Medical and Surgical	68	100%	42	100%	20	100%	13	100%	96	98%
Orthopedic	0	0	0	0	0	0	0	0	1	1%
Psychiatric	0	0	0	0	0	0	0	0	1	1%
<u>Teaching</u>										
Residency training	17	25%	6	14%	5	25%	2	15%	14	14%
Medical school affiliation	15	22%	6	14%	5	25%	2	15%	14	14%









## Appendix M

### Analysis of Length of Time Between Hospital Discharge and Cases Reported to the Univbrsity of Minnesota (includes cases reported By FIs only)

#### Days Between Hospital Discharge and Sample Received

<u>Days</u>	<u>Frequency</u>	<u>Cumulative Percent</u>
less than 14	88	8.1%
15 through 30	479	52.2%
31 through 60	343	83.7%
Total	1,087	100.0%

Mean            38 days

Median        25 days

Selected hospital characteristics were examined to determine if there was a relationship between the length of time between discharge and when a claim was received by the University of Minnesota, by specific hospital characteristics. No significant or consistent relationship was found.

Number of days from discharge to received	<u>Length of Stay</u>				<u>Total</u>
	<u>less than 4 days</u>	<u>4 through 6 days</u>	<u>7 through 9 days</u>	<u>more than 9 days</u>	
less than 15 days	5.8	8.2	10.8	7.2	8.1
15 through 30	43.0	46.3	45.3	41.7	44.1
31 through 60	34.1	30.6	29.1	32.7	31.6
more than 60	17.1	14.9	14.9	18.3	16.3
Total	23.7	23.5	27.2	25.6	100.0

	<u>Value</u>	<u>Significance</u>
Pearson Correlation Coefficient	9.87	0.36
Mantel-Haenszel Test	2.88	0.09

Number of days from discharge to received	<u>Hospital Bed Size</u>			<u>Total</u>
	<u>less than 120 beds</u>	<u>120 through 249 beds</u>	<u>more than 249 beds</u>	
less than 15	4.8	7.7	9.9	8.1
15 through 30	41.4	42.8	46.1	44.1
31 through 60	32.3	32.3	28.8	31.6
more than 60	21.5	13.8	15.2	16.3
Total	23.1	28.6	48.3	100.0

	<u>Value</u>	<u>Significance</u>
Pearson Correlation Coefficient	8.74	0.19
Mantel-Haenszel Test	1.47	0.22







## Appendix N

### Comparison Between Patient Recall of Pre-Operative Status at Two Weeks and Three Months After Discharge for the Same Patient

#### Hip Replacement Patients (N=19)

<u>Item/Scale</u>	<u>Sample Size</u>	<u>Range</u>	<u>Average Difference Between 3 Month and 2 Week Scores</u>	<u>Error as a Percent of the Range</u>
Walking distance (without device)	18	0-6	-0.33	5.5
Walking distance (with device)	18	0-6	0.39	6.5
Trouble moving	19	0-6	-0.68	11.3
Pain during activity	19	0-15	1.52	10.1
Activity (vigorous/moderate)	19	1-6	-0.31	6.2
ADL	19	0-3613	-187.47	5.2
IADL	19	0-1558	-79.74	5.1
General health	19	1-4	0.00	0.0

#### Cholecystectomy Patients (N=28)

<u>Item/Scale</u>	<u>Sample Size</u>	<u>Range</u>	<u>Average Difference Between 3 Month and 2 Week Scores</u>	<u>Error as a Percent of the Range</u>
Pain score	15	0-18	0.07	0.4
Pain severity	15	1-5	-0.33	8.2
Onset	15	0-684	-50.67	7.4
Symptom score	31	0-15	-0.52	3.5
Gallbladder pain	28	0-3	-0.14	4.7
Activity (vigorous/moderate)	28	1-6	0.20	4.0
ADL	30	0-3613	26.68	0.8
IADL	28	0-1558	39.14	2.5
General health	28	1-4	-0.07	2.3









## Appendix O

### Survey Response Rates, Reasons for Exclusion, Location of Cases, and Reasons Lost to Follow-up in the Pretest

	<u>Number</u>	<u>Percent</u>
Total FI Sample Received	1671	
Excluded	776	46%
Eligible sample	895	54%
Total FI Sample (Cholecystectomy and Total Hip) Received	1671	
Total FI Sample (Cholecystectomy and Total Hip) Used	895	54%
Total FI Sample Excluded	776	46%
<u>Cholecystectomy</u>		
Total FI Cholecystectomy Sample Received	1169	
Total FI Cholecystectomy Sample Used	627	54%
Total Cholecystectomy Sample Excluded	542	46%
Sample Excluded		
Cholecystectomy as secondary procedure	84	15%
Patient too young	48	9%
Sample received outside interview window*	135	25%
More than one of the above	275	51%
<u>Elective Total Hip Replacement</u>		
Total FI Hip Sample Received	502	
Total FI Hip Sample Used	268	53%
Total FI Hip Sample Excluded	234	47%
Sample Excluded		
Hip exclusion codes	46	19%
Patient too young	16	7%
Sample received outside interview window*	58	25%
More than one of the above	114	49%
Hip Exclusion Codes:		
820 Fracture of neck or femur	38	
714.0 Rheumatoid arthritis	5	
731.0 Paget's disease	2	
732.1 Legg-Calve-Perthes	1	
Eligible Sample	895	
Sample located	863	96%
Sample unable to locate	32	4%
Sample Located	863	
Attempted to call	718	83%
Did not attempt to call	145	17%
Attempted to call	718	
Verified	710	99%
Unable to reach	8	1%
Sample Verified	710	
Agreed to participate	683	96%
Refused	3	.004%
Deceased	12	2%
Bad sample	12	2%
HMO	9	-
Age	1	-
Wrong procedure	2	-

\*window is discharge date plus 30 days







## Appendix P

### Pretest Survey Response Rates

#### Survey Response Rates, Location of Cases, and Reasons Lost to Follow-up

##### Cholecystectomy

	<u>Number</u>	<u>Percent</u>
Baseline interview		
Sample completed	195	
Survey completed	188	96%
Refused	7	4%
Follow-up interview		
Sample contacted	188	
Survey completed	174	93%
Lost to follow-up	14	7%
Refused	6	3%
Deceased	4	2%
Unable to locate	4	2%

##### Elective Total Hip Replacement

	<u>Number</u>	<u>Percent</u>
Baseline interview		
Sample contacted	164	
Survey completed	158	96%
Refused	6	4%
Follow-up interview		
Sample contacted	158	
Survey completed	149	94%
Lost to follow-up	9	6%
Refused	4	
Deceased	1	
Unable to locate	4	









## Appendix Q

### Analysis of Reliability Measures for Proxy Responses in the Pretest

Level of Agreement Between Patients with Hip Replacements and Proxies  
at the 3-month Interview (N=20)

<u>Item/Scale</u>	<u>Level of Exact Agreement (%)</u>	<u>Statistical Significance*</u>
Activity (vigorous/moderate)	74	<.001
Walking distance (without device)	55 (agreement within one category was 70%)	<.001
Walking distance (with device)	30 (agreement within one category was 45%)	<.01
Trouble walking	60	<.01
ADL	95	<.01
IADL	50	<.01

Level of Agreement Between Patients with Cholecystectomies and Proxies  
at the 3-month Interview (N=16)

<u>Item/Scale</u>	<u>Level of Exact Agreement (%)</u>	<u>Statistical Significance*</u>
Activity (vigorous/moderate)	75	<.001
ADL	100	<.0001
IADL	31	NS
Time to resume activities	40 (agreement within one category was 75%)	NS
Gall bladder related pain	95	<.01

\*based on Pearson product-moment correlation







## Appendix R

### Use of In-person Interviewers or Proxy Respondents During Pretest

#### Frequency of Use of In-person Interviewers

##### Cholecystectomy

	<u>Wisconsin</u>	<u>Arkansas</u>	<u>Total</u>
Telephone	131	49	180
In-person	7	1	8

##### Elective Total Hip Replacement

	<u>Wisconsin</u>	<u>Arkansas</u>	<u>Total</u>
Telephone	54	34	88
In-person	6	1	7

#### Reasons for In-person Interviewers

##### Cholecystectomy

	<u>First Interview</u>		<u>Second Interview</u>	
	<u>Wisconsin</u>	<u>Arkansas</u>	<u>Wisconsin</u>	<u>Arkansas</u>
Hearing Loss	3	0	3	0
Institutionalized	3	0	1	0
Training	1	1	0	0
Total	7	1	4	0

##### Elective Total Hip Replacement

	<u>First Interview</u>		<u>Second Interview</u>	
	<u>Wisconsin</u>	<u>Arkansas</u>	<u>Wisconsin</u>	<u>Arkansas</u>
Hearing Loss	1	0	1	0
Institutionalized	2	0	1	0
Training	3	1	0	0
Total	6	1	2	0



## Frequency of Use of Proxy Respondents

### Cholecystectomy

	<u>Wisconsin</u>	<u>Arkansas</u>	<u>North Carolina</u>	<u>Total</u>
Patient	119	43	0	162
Proxy Respondent	19	7	0	26

### Elective Total Hip Replacement

	<u>Wisconsin</u>	<u>Arkansas</u>	<u>North Carolina</u>	<u>Total</u>
Patient	57	35	48	140
Proxy Respondent	3	0	3	6

## Reasons for Use of Proxy Respondents

### Cholecystectomy

	<u>First Interview</u>			<u>Second Interview</u>		
	<u>Wisconsin</u>	<u>Arkansas</u>	<u>North Carolina</u>	<u>Wisconsin</u>	<u>Arkansas</u>	<u>North Carolina</u>
Hearing Loss	4	4	0	4	5	0
Institutionalized	1	0	0	2	0	0
Aphasic	2	1	0	1	1	0
Confused	4	0	0	4	0	0
Depressed	1	0	0	1	0	0
Respondent Preference	1	1	0	1	1	0
Poor Health	3	0	0	3	0	0
Total	16	6	0	16	7	0

### Elective Total Hip Replacement

	<u>First Interview</u>			<u>Second Interview</u>		
	<u>Wisconsin</u>	<u>Arkansas</u>	<u>North Carolina</u>	<u>Wisconsin</u>	<u>Arkansas</u>	<u>North Carolina</u>
Hearing Loss	0	0	1	0	0	1
Institutionalized	1	0	0	1	0	0
Aphasic	1	0	0	0	0	0
Confused	1	0	1	0	0	2
Depressed	0	0	0	0	0	0
Respondent Preference	0	0	0	0	0	0
Total	3	0	0	1	0	3

Other proxy interviews done for reliability only









## Appendix S

### List of FIs Participating in Full Study

Top 13 fIs (FI ID Numbers)	Number of States (partial)	Number of States (Where FI serves >50% of Medicare population)	Number of Hips	Number of Cholecystectomies
00400	1	1 TX	3,305	7,515
00040	2	1 CA	6,130	7,355
00308	1	1 NY	4,445	7,275
00090	1	1 FL	4,035	6,860
00332	1	1 OH	3,185	5,935
00363	1	1 PA	3,080	5,810
00121	1	1 IL	2,555	4,785
00230	3	3 LA, MS, MO	1,385	4,025
00310	1	1 NC	1,910	4,010
00220	1	1 MN	2,490	2,345
00450	1	1 WI	2,385	3,400
00130	1	1 IN	2,300	3,715
Total			37,205	63,030







## **Appendix T**

### **Design Effect in the Full Study**

For reasons of time and cost pressures, this study will have to deal with a limited number of fiscal intermediaries and will have to accrue the sample in a limited period. Given these pressures, we propose to work with the largest FIs in order to maximize the number of cases to be collected. Using a restricted sample of FIs will impose some threats to generalizability but there is no a priori reason to assume that this sample will distort the findings compared to a national sample. Indeed, a national sample would present its own problems. Even if a national sample were chosen there would still be considerable potential sampling error whether we used states as the sampling basis or FIs.

The experience from the pretest indicates that even with a group of five non-randomly chosen states we observed substantial variation in the nature of the hospitals available for study, as indicated in Table 1. It seems reasonable to expect that with a larger sample drawn to represent a priori differences in service characteristics we will be able to obtain a sample that will allow us to test many of the effects of these differences.

There is a compelling reason to opt to work with the largest FIs if we hope to achieve the targeted sample sizes in the time allowed. Table 2 shows the number of states served and the number of hip and cholecystectomy procedures for each of the 13 FIs that produced the largest number of hip and cholecystectomy cases in 1991.

Clearly, these 13 FIs cover a broad population, both in terms of a number of important geographic dimensions and raw size. These FIs represent 53% of all hip and 55% of all cholecystectomy procedures performed on the Medicare population during 1991.

Table 2 also addresses our second constraint: the time necessary to accrue the sample. We are working from a fixed sample size of 1,500 hip (1,100 urban and 400 rural) and 1,100 (urban) cholecystectomy cases and a ten month data accrual window. Peer Review Organizations only collect medical records for a random 5% of their cases. Because we need a medical record for each subject in the study we are limited to taking 5% of each FIs hip and cholecystectomy population. From the pretest we established that nearly 40% of all identified cases were ineligible for the study, primarily because they came to our attention more than a month after their procedure. For this study the interview window has been widened and this number should go down. A simple calculation for the expected sample per month yields 108 hips and 192 cholecystectomies. Thus, we will accrue the hip sample in just over ten months and the cholecystectomy sample in just under eight months. With changes to the interview protocol we feel comfortable in projecting that both samples will be complete in less than the ten months allotted.

Though we have non-random sampling of the PSUs (i.e., the FIs), the design still utilizes a multi-stage cluster sample and we can describe the cluster effects due to heterogeneity between hospitals.

Another source of the design effect is the degree of heterogeneity within hospitals. Because cluster sampling imposes some restrictions on the independence of the choice of respondents in the second stage, there is concern about possible design effects that might require very large samples within each cluster. The major driving force behind such a concern is the extent of intraclass correlation. The number of respondents needed within each cluster can be estimated from the following formula:





The variance expression  $V(\bar{y})$  has the alternative representation

$$V(\bar{y}) = \frac{(N - 1)S_Y^2}{mMn_oN_o(N_o - 1)} [(N_o - n_o) + A\{1 + (N_o - 1)r_c\}],$$

where

$$A = \frac{(M - 1)N_o(n_o - 1) - (m - 1)n_o(N_o - 1)}{N_o(M - 1)}$$

and

$$r_c = \frac{\sum_i \sum_{j \neq j'} (Y_{ij} - \bar{Y})(Y_{ij'} - \bar{Y})}{(N_o - 1) \sum_i \sum_j (Y_{ij} - \bar{Y})^2}$$

is the intraclass correlation coefficient.(1)

The formula shown above reduces to simple random sampling when  $r_c=0$ .

In the present case, the concern around intraclass correlation would be greatest if there were an *a priori* reason to suspect that the choice of site would affect the results from the sample of hospitals within site. For example, length of stay is known to vary from one part of the country to another. Hence, if one were trying to estimate lengths of stay, choosing clusters in one area would produce a biased sample over another. In the case of outcomes, there is no strong *a priori* reason to suspect that such a bias exists.

We have used data from our current study of Medicare discharges in the Post-Acute Care Study (PAC) to look for intraclass correlation effects. The study permits us to look directly at the effect of sites (in this case three different cities) on outcomes, both independently and corrected through regression equations. Although there is a significant site effect in the type of post-hospital care to which patients are discharged, there is no significant effect of site on outcomes of care.

For PHOS, as with PAC, the principal concern is directed to differences among cities rather than within cities, because we will generally include all or most of the eligible hospitals in any city chosen. In the case of PAC, the  $r_c$  across the three cities for our functional status outcome was 0.00106. Even the within city  $r_c$ 's were small.

Twin Cities	.00862
Houston*	.02373
Pittsburgh	.00462

\*We had the greatest difficulty getting hospital participation in Houston and were able to get only 15 of the targeted 30 hospitals to join the study. In the other two cities we had either complete participation or all but two hospitals.

## Reference

1. Hedayat AS and BK Sinha. Design and Inference in Finite Population Sampling, John Wiley & Sons, New York, 1991.



Table 1  
Characteristics of Hospitals Served by Fiscal Intermediaries

	<u>Wisconsin</u>		<u>Arkansas</u>		<u>Illinois</u>		<u>Nevada</u>		<u>North Carolina</u>	
Total Hospitals	68		42		20		13		98	
<u>Characteristics</u>	#	%	#	%	#	%	#	%	#	%
<u>Total Beds</u>										
under 100 beds	31	45%	22	53%	11	55%	4	31%	36	37%
101 - 200 beds	16	24%	11	26%	1	5%	3	23%	29	30%
201 - 300 beds	10	15%	3	7%	4	20%	1	8%	13	13%
301 - 400 beds	6	9%	5	12%	1	5%	2	15%	6	6%
401 and over	5	7%	1	2%	3	15%	3	23%	14	14%
Urban	36	53%	9	21%	10	50%	10	77%	40	41%
Rural	32	47%	33	79%	10	50%	3	23%	58	59%
<u>Ownership</u>										
Non profit	46	68%	17	40%	9	45%	2	15%	58	59%
Church	21	31%	7	17%	2	10%	2	15%	2	2%
Hospital district	0	0	0	0	2	10%	1	8%	7	7%
For-profit	0	0	7	17%	6	30%	4	31%	9	9%
Government	1	1%	11	26%	1	5%	4	31%	22	23%
<u>Service Type</u>										
General Med & Surg	68	100%	42	100%	20	100%	13	100%	96	98%
Orthopedic	0	0	0	0	0	0	0	0	1	1%
Psychiatric	0	0	0	0	0	0	0	0	1	1%
<u>Teaching</u>										
Residency training	17	25%	6	14%	5	25%	2	15%	14	14%
Medical school affiliation	15	22%	6	14%	5	25%	2	15%	14	14%



Table 2  
Number of States Served and Number of Procedures for Top Thirteen FIs in 1991.

Top 13 FIs (FI ID#s)	# states (partial)	# states (where FI serves >50% of Medicare population)	# hips	# cholecystectomy
52280	23	0	4,745	9,600
00400	1	1 TX	3,305	7,515
00040	2	1 CA	6,130	7,355
00308	1	1 NY	4,445	7,275
00090	1	1 FL	4,035	6,860
00332	1	1 OH	3,185	5,935
00363	1	1 PA	3,080	5,810
00210	1	1 MI	2,860	5,005
00121	1	1 IL	2,555	4,785
51051	12	1 NV	3,365	4,505
00423	2	2 VA, WV	2,115	4,150
00230	3	3 LA, MI, MO	1,385	4,025
00310	1	1 NC	1,910	4,010
Total	50 (31 non- overlapping states)	15	80,740	138,780









## Appendix U

### Proportional Sampling Plan by FI in the Full Study

(Figures based on 1993 data)

FI	Total Cholecystectomies	Inpatient Opens	Percent Inpatient Opens of Total Cholecystectomies	Percent FI Inpatient Opens to Total FI	Sample Needed
TX	9589	3569	37%	10%	50
CA	9246	3918	42%	11%	55
NY	9565	4739	50%	13%	67
FL	10020	3785	38%	11%	53
OH	8700	3584	41%	10%	50
PA	8572	3743	44%	11%	53
MS	4784	2057	43%	6%	29
IL	6982	3281	47%	9%	46
NC	5549	2093	38%	6%	30
IN	5011	1761	35%	5%	25
WI	4028	1578	39%	4%	22
MN	3165	1403	44%	4%	20
TOTAL		35511		100%	500
		26.6% of total should be from rural hospitals			133

FI	Total Cholecystectomies	Inpatient Laparoscopy	Percent Inpatient Laparoscopy of Total Cholecystectomies	Percent FI Inpatient Laparoscopy to Total FI	Sample Needed
TX	9589	3858	40%	10%	52
CA	9246	4561	49%	12%	62
NY	9565	4558	48%	12%	62
FL	10020	3783	38%	10%	51
OH	8700	3476	40%	9%	47
PA	8572	4385	51%	12%	59
MS	4784	2212	46%	6%	30
IL	6982	2487	36%	7%	34
NC	5549	2304	42%	6%	31
IN	5011	1856	37%	5%	25
WI	4028	2186	54%	6%	29
MN	3165	1325	42%	4%	18
TOTAL		36991		100%	500
		26.6% of total should be from rural hospitals			133

FI	Total Cholecystectomies	Outpatient Laparoscopy	Percent Outpatient Laparoscopy of Total Cholecystectomies	Percent FI Outpatient Laparoscopy to Total FI	Sample Needed
TX	9589	2163	23%	17%	85
CA	9246	767	8%	6%	30
NY	9565	268	3%	2%	11
FL	10020	2452	24%	19%	96
OH	8700	1641	19%	13%	65
PA	8572	444	5%	3%	17
MS	4784	515	11%	4%	20
IL	6982	1214	17%	10%	48
NC	5549	1152	21%	9%	46
IN	5011	1394	28%	11%	55
WI	4028	264	7%	2%	10
MN	3165	437	14%	3%	17
TOTAL		12711		100%	500
		26.6% of total should be from rural hospitals			133



FI	Total Hips	Proportion of Total Hips	Sample Needed
TX	3305	9%	99
CA	6130	16%	185
NY	4445	12%	134
FL	4035	11%	121
OH	3185	9%	96
PA	3080	8%	93
MS	1385	4%	42
IL	2555	7%	77
NC	1910	5%	57
IN	2300	6%	69
WI	2385	6%	72
MN	2490	7%	75
TOTAL		100%	1120







**Appendix V**  
**Medicare Claim Form**  
**and Type of Bill Code Structure**

EFFECTIVE: JANUARY 1, 1991  
7/18/90-2

FORM LOCATOR 4

Code Structure

Type of Facility - 1st Digit

- 1 Hospital
- 2 Skilled Nursing
- 3 Home Health+
- 4 Christian Science (Hospital)
- 5 Christian Science (Extended Care)
- 6 Intermediate Care
- 7 Clinic\*
- 8 Special Facility\*
- 9 Reserved for National Assignment

Bill Classification (Except Clinics and Special Facilities) - 2nd Digit

- 1 Inpatient (Including Medicare Part A)
- 2 Inpatient (Medicare Part B only)
- 3 Outpatient
- 4 Other (for hospital referenced diagnostic services, or home health not under a plan of treatment)\*\*
- 5 Intermediate Care - Level I\*\*
- 6 Intermediate Care - Level II\*\*
- 7 Intermediate Care - Level III\*\*
- 8 Swing Beds
- 9 Reserved for National Assignment

Bill Classification (Clinics Only) - 2nd Digit

- 1 Rural Health
- 2 Hospital Based or Independent Renal Dialysis Center
- 3 Free Standing
- 4 Outpatient Rehabilitation Facility (ORF)
- 5 Comprehensive Outpatient Rehabilitation Facilities (CORFs)
- 6-8 Reserved for National Assignment
- 9 Other





Bill Classification (Special Facilities Only) - 2nd Digit

- 1 Hospice (non-hospital based)
- 2 Hospice (hospital-based)
- 3 Ambulatory Surgery Center
- 4 Free Standing Birthing Center
- 5 Rural Primary Care Hospital
- 6-8 Reserved for National Assignment
- 9 Other

Notes for Type of Facility (1st digit) and Bill Classification (2nd digit):

- + If Medicare Home Health:  
Use 32X for visits under a plan of treatment under Part B.  
Use 33X for visits under a plan of treatment under Part A, including DME under Part A.  
Use 34X for Medical and surgical services not under a plan of treatment.
- \* If Type of Facility - code 7 (clinic) is used, then the Bill Classification (clinics) - 2nd Digit must be used.  
If Type of Facility - code 8 (Special Facility) is used, then the Bill Classification (Special Facilities) - 2nd Digits must be used.
- \*\* To be defined at the state level.

Frequency - 3rd Digit

- 0 Non-Payment/Zero Claim
- 1 Admit through Discharge Claim
- 2 Interim - First Claim
- 3\* Interim - Continuing Claim
- 4\* Interim - Last Claim
- 5 Late Charge(s) Only Claim
- 6\*\* Adjustment of Prior Claim
- 7 Replacement of Prior Claim
- 8 Void/Cancel of Prior Claim
- 9 Reserved for National Assignment

Notes for Frequency (3rd digit):

- \* Do not use for Medicare PPS claims (For second and subsequent interim bills use code 7, and see Condition code D3 (FL24-FL30).
- \*\* Not an acceptable Medicare Code.







## Appendix W

### Days Between Hospital Discharge and Total Sample Received in Full Study

<u>Days</u>	<u>Cholecystectomy</u>	<u>Elective Total Hip Replacement</u>	<u>Total Intake</u>	<u>Cumulative Percent</u>
1 - 7	12	4	16	0.23%
8-14	354	223	577	8.69%
15-30	1711	1020	2731	48.75%
31- 60	1700	899	2599	86.87%
61 or more	662	233	895	100.00%
Total	4439	2379	6818	









## Appendix X

# Number of Complete Surveys Across Each Data Point in Full Study

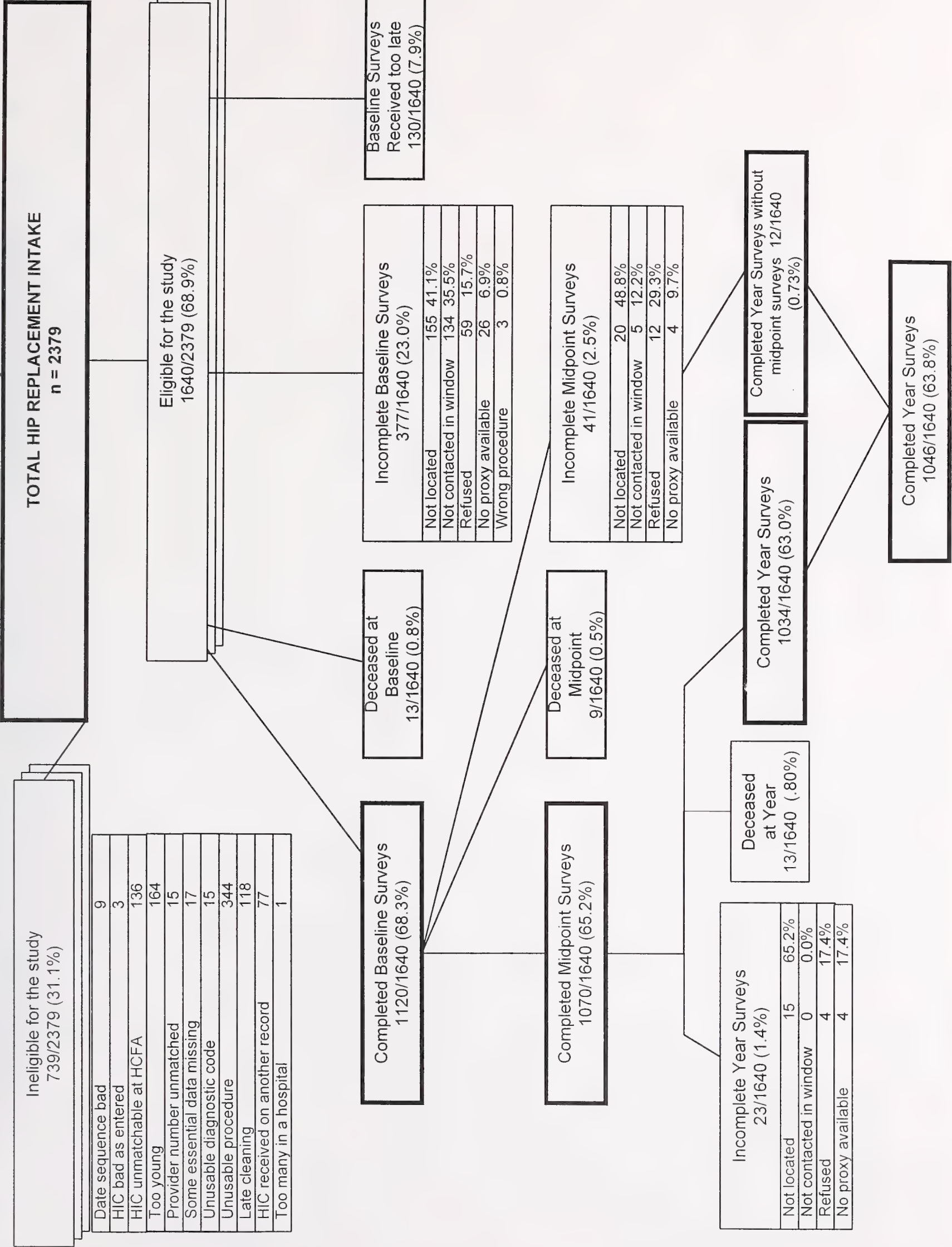
		INPATIENT								
	Hip	Cholecystectomy								
		Laparoscopic				Open				
		Urban	Rural	Geography Unknown	Total	Urban	Rural	Geography Unknown	Total	
Total Intake	2,379	1,051	334	20	1,405	1,336	383	22	1,741	3,146
Excluded (ineligible for study)	739	404	106	20	530	665	151	22	838	1,368
Eligible Sample	1,640	647	228		875	671	232		903	1,778
a. Deceased	13	4	5		9	32	7		39	48
b. Received too late	130	48	19		67	72	32		104	171
c. Eligible at Baseline	1,497	595	204		799	567	193		760	1,559
i. Completed	1,120	398	148		546	332	118		450	996
ii. Incomplete	377	197	56		253	235	75		310	563
-Not located	155	68	21		89	94	31		125	214
-Not contacted in window	134	85	23		108	73	17		90	198
-Refused	59	28	6		34	28	14		42	76
-No proxy available	26	16	6		22	40	13		53	75
-Wrong procedure	3	0	0		0	0	0		0	0
d. Midpoint Survey	1,070	373	140		513	308	112		420	933
i. Completed	9	3	0		3	10	1		11	14
ii. Deceased										
iii. Incomplete	41	22	8		30	14	5		19	49
-Not located	20	11	2		13	7	3		10	23
-Not contacted in window	5	1	1		2	2	1		3	5
-Refused	12	6	3		9	4	1		5	14
-No proxy available	4	4	2		6	1	0		1	7
e. One Year Survey	1,046	360	134		494	294	109		403	897
i. Completed										
ii. Deceased	13	5	3		8	9	2		11	19
iii. Incomplete	23	17	6		23	8	4		12	35
-Not located	15	10	3		13	4	1		5	18
-Refused	4	6	2		8	3	2		5	13
-No proxy available	4	1	1		2	1	1		2	4



## Number of Complete Surveys Across Each Data Point in Full Study

OUTPATIENT									
Hip	Cholecystectomy								
	Laparoscopic				Open				
	Geography				Geography				
	Urban	Rural	Unknown	Total	Urban	Rural	Unknown	Total	TOTAL
Total Sample	987	291	11	1,289	4	0	0	4	1,293
Excluded (ineligible for study)	281	75	11	367	3	0	0	3	370
Eligible Sample	706	216	0	922	1	0	0	1	923
a. Deceased	1	0		1	0	0		0	1
b. Received too late	184	41		225	0	0		0	225
c. Baseline Survey	521	175		696	1	0		1	697
i. Completed	388	136		524	0	0		0	524
ii. Incomplete	133	39		172	1	0		1	173
-Not located	66	20		86	1	0		1	87
-Not contacted in window	25	3		28	0	0		0	28
-Refused	23	9		32	0	0		0	32
-No proxy available	19	7		26	0	0		0	26
d. Midpoint Survey									
i. Completed	368	130		498	0	0		0	498
ii. Deceased	2	1		3	0	0		0	3
iii. Incomplete	18	5		23					23
-Not located	5	2		7	0	0		0	7
-Not contacted in window	2	1		3	0	0		0	3
-Refused	7	1		8	0	0		0	8
-No proxy available	4	1		5	0	0		0	5
e. One Year Survey									
i. Completed	357	128		485	0	0		0	485
ii. Deceased	7	1		8	0	0		0	8
iii. Incomplete	9	3		12	0	0		0	12
-Not located	3	2		5	0	0		0	5
-Refused	6	1		7	0	0		0	7









CHOLECYSTECTOMY INTAKE  
n = 4439

Ineligible for the study  
1738/4439 (39.2%)

Date sequence bad	30
HIC bad as entered	7
HIC unmatched at HCFA	317
Too young	451
Provider number unmatched	112
Some essential data missing	32
Unusable diagnostic code	42
Unusable procedure	546
Late cleaning	97
HIC received on another record	159
Too many in a hospital	249

Eligible for the study  
2701/4439 (60.8%)

Completed Baseline Surveys  
1520/2701 (56.3%)

Deceased at  
Baseline  
49/2701 (1.8%)

Incomplete Baseline Surveys 735/2701 (27.2%)	
Not located	301 41.0%
Not contacted in window	226 30.7%
Refused	108 14.7%
No proxy available	101 13.6%
Wrong procedure	0 0.0%

Baseline Surveys  
Received too late  
396/2701 (14.7%)

Completed Midpoint Surveys  
1431/2701 (53.0%)

Deceased at  
Midpoint  
17/2701 (0.6%)

Incomplete Midpoint Surveys 72/2701 (2.7%)	
Not located	30 42.7%
Not contacted in window	8 12.1%
Refused	22 30.6%
No proxy available	12 14.6%

Incomplete Year Surveys 47/2701 (1.7%)	
Not located	23 48.9%
Not contacted in window	0 0.0%
Refused	20 42.6%
No proxy available	4 8.5%

Deceased  
at Year  
27/2701 (1.0%)

Completed Year Surveys  
1357/2701 (50.2%)

Completed Year Surveys without  
midpoint surveys 25/2701 (0.9%)

Completed Year Surveys  
1382/2701 (51.2%)









## Appendix Y

### Completed Surveys at Each Data Point by FI for Full Study

#### Inpatient Hips

R	Baseline	Midpoint	Year	Percent Loss
CA 40, 51051	171	166	159	7.0%
FL 90	123	112	108	12.2%
IL 121	80	75	76	5.0%
IN 130	72	71	68	5.6%
MN 220	78	77	76	2.6%
MS 230	44	43	42	4.5%
NC 310	59	55	56	5.1%
NY 308	135	126	123	8.9%
OH 332	96	93	91	5.2%
PA 363	93	90	89	4.3%
TX 400	93	89	86	7.5%
WI 450	76	73	72	5.3%
TOTAL	1120	1070	1046	6.6%

#### Inpatient Laproscopy

R	Baseline	Midpoint	Year	Percent Loss
CA 40, 51051	65	64	61	6.2%
FL 90	50	49	48	4.0%
IL 121	40	38	36	10.0%
IN 130	31	30	28	9.7%
MN 220	29	27	25	13.8%
MS 230	30	28	25	16.7%
NC 310	32	31	29	9.4%
NY 308	67	59	56	16.4%
OH 332	46	44	41	10.9%
PA 363	64	59	62	3.1%
TX 400	53	48	45	15.1%
WI 450	37	34	36	2.7%
TOTAL	544	511	492	9.6%

#### Inpatient Opens

R	Baseline	Midpoint	Year	Percent Loss
CA 40, 51051	42	38	38	9.5%
FL 90	53	50	50	5.7%
IL 121	44	40	38	13.6%
IN 130	22	20	19	13.6%
MN 220	24	24	21	12.5%
MS 230	18	16	16	11.1%
NC 310	30	29	28	6.7%
NY 308	62	60	57	8.1%
OH 332	40	38	36	10.0%
PA 363	53	48	46	13.2%
TX 400	41	38	35	14.6%
WI 450	23	21	21	8.7%
TOTAL	452	422	405	10.4%



Outpatient Laparoscopy

R	Baseline	Midpoint	Year	Percent Loss
CA 40, 51051	28	27	25	10.7%
FL 90	103	98	97	5.8%
IL 121	57	53	52	8.8%
IN 130	62	59	56	9.7%
MN 220	10	10	10	0.0%
MS 230	16	16	16	0.0%
NC 310	52	48	47	9.6%
NY 308	18	16	17	5.6%
OH 332	64	62	61	4.7%
PA 363	25	23	20	20.0%
TX 400	75	72	71	5.3%
WI 450	14	14	13	7.1%
TOTAL	524	498	485	7.4%









## Appendix Z

### Comparison Between Those Completing Baseline Interview and Those Not Completing Baseline Interview Using Logit Specifications

<u>Characteristics</u>	<u>Cholecystectomy</u>	<u>Total Hip Replacement</u>
Gender	.6541	.7071
Length of Stay	.9521	.9527
Age	.9764	.9588
California	.7135	.5182
Florida	2.0881	1.1984
Illinois	1.6045	.9932
Indiana	1.7266	2.5968
Minnesota	5.1568	1.3382
Mississippi	comparison group	comparison group
New York	1.3430	1.1268
North Carolina	1.8584	1.1778
Ohio	.9834	.8810
Pennsylvania	1.7631	1.3206
Texas	1.0222	.8772
Wisconsin	2.2152	2.3874
Laparoscopic	1.2573	

Cholecystectomy: Model  $X^2=184.720$ ,  $df=15$ ,  $p<.000$

Total Hip Replacement: Model  $X^2=81.658$ ,  $df=14$ ,  $p<.000$







# Appendix AA

## Reasons Patients Excluded from Full Study

### INPATIENT

	Hip	Cholecystectomy									
		Laparoscopic					Open				
		Urban	Rural	Geography Unknown	Total	Urban	Rural	Geography Unknown	Total	TOTAL	
Total Intake	2,379	1,051	304	20	1,405	1,336	383	22	1,741	3,146	
Excluded (ineligible for study)*	739	404	106	20	530	665	151	22	838	1,368	
i. Date sequence bad	9	14	3	0	17	11	1	0	12	29	
ii. HIC bad as entered	3	0	1	0	1	3	1	0	4	5	
iii. HIC unmatchable at HCFA	136	56	28	1	84	95	34	5	134	218	
iv. Too young	164	106	43	1	149	114	30	2	146	295	
v. Provider number unmatchable	15	0	0	20	20	0	0	22	22	42	
vi. Some essential data missing	17	13	1	0	14	6	0	0	6	20	
vii. Unusable diagnostic code	15	9	5	0	14	13	2	1	23	37	
viii. Unusable procedure	344	74	12	0	86	386	63	8	450	536	
ix. Late cleaning	118	57	2	0	59	15	4	1	20	79	
x. HIC received on another record	77	55	24	0	79	38	25	0	63	142	
xi. Too many in a hospital	1	75	10	0	85	114	11	0	125	210	

\*Total number of individuals excluded from the study.  
Some individuals may have been excluded for more than one reason.



# Reasons Patients Excluded from Full Study

## OUTPATIENT

	Hip	Cholecystectomy									
		Laparoscopic					Open				
		Urban	Rural	Geography Unknown	Total	Urban	Rural	Geography Unknown	Total	TOTAL	
Total Intake	0	987	291	11	1,289	4	0	0	4	1,293	
Excluded (ineligible for study)*	0	281	75	11	361	3	0	0	3	370	
i. Date sequence bad	0	1	0	0	1	0	0	0	0	1	
ii. HIC bad as entered	0	2	0	0	2	0	0	0	0	2	
iii. HIC unmatched at HCFA	0	73	23	1	97	2	0	0	2	99	
iv. Too young	0	120	33	1	154	2	0	0	2	156	
v. Provider number unmatched	0	47	12	11	70	0	0	0	0	70	
vi. Some essential data missing	0	9	3	0	12	0	0	0	0	12	
vii. Unusable diagnostic code	0	5	0	0	5	0	0	0	0	5	
viii. Unusable procedure	0	7	2	0	9	1	0	0	1	10	
ix. Late cleaning	0	18	0	0	18	0	0	0	0	18	
x. HIC received on another record	0	12	5	0	17	0	0	0	0	17	
xi. Too many in a hospital	0	33	6	0	39	0	0	0	0	39	

\*Total number of individuals excluded from the study.  
Some individuals may have been excluded for more than one reason.









## Appendix AB

### Comparison Between Eligible and Ineligible Samples and Between Eligible and Those Eligible Received Too Late to Interview Using Logit Specification

<u>Characteristics</u>	Cholecystectomy		Total Hip Replacement	
	<u>Ineligible*</u>	<u>Received Too Late**</u>	<u>Ineligible*</u>	<u>Received Too Late**</u>
Gender	1.0536	1.0951	.8263	1.1504
Length of Stay	.9513	.9792	.9159	.9962
Age	1.0790	.9975	1.0414	.9692
California	3.2859	.5002	1.8958	1.4676
Florida	4.5890	.2651	1.3951	.4314
Illinois	1.8167	.3230	1.9796	.3510
Indiana	2.6114	.7307	1.7782	1.2611
Minnesota	2.6283	.1715	1.4498	.5584
Mississippi	comparison group	comparison group	comparison group	comparison group
New York	4.2310	.0690	2.1373	.1277
North Carolina	1.6933	.3041	3.3209	.0987
Ohio	2.3899	.7945	1.3416	.8528
Pennsylvania	4.6190	.0388	1.8337	.1890
Texas	2.5926	.8075	1.4086	.5819
Wisconsin	2.4407	.0266	1.2909	.1811
Laparoscopic	2.0692	1.1894		

\* Cholecystectomy: Model  $X^2=806.610$ ,  $df=15$ ,  $p<.000$   
Total Hip Replacement: Model  $X^2=151.836$ ,  $df=14$ ,  $p<.000$

\*\* Cholecystectomy: Model  $X^2=209.062$ ,  $df=14$ ,  $p<.000$   
Total Hip Replacement: Model  $X^2=71.821$ ,  $df=14$ ,  $p<.000$







# Appendix AC

## How the Respondents Were Found at Baseline in Full Study

How found	Eligible		Completed Survey		Dead		Survey Incomplete	
	Cholecystectomy	Hip	Cholecystectomy	Hip	Cholecystectomy	Hip	Cholecystectomy	Hip
Phone CD	1201	845	1070	787	34	8	97	50
Directory Assist	342	252	309	237	12	4	21	11
Hosp. Information	0	1	0	1	0	0	0	0
Neighbor	40	28	37	28	0	0	3	0
Other	110	68	104	67	3	1	3	0
Missing Code	1007	446	0	0	0	0	62	313
Total	2701	1640	1520	1120	49	13	736	374









## Appendix AD

### Use of and Reason for Proxies in Full Study

<u>Status</u>	<u>Cholecystectomy</u>			<u>Total Hip Replacement</u>		
	<u>Patient</u>	<u>Proxy</u>		<u>Patient</u>	<u>Proxy</u>	
Baseline	1340	180	11.8%	1055	65	5.9%
Midpoint	1268	163	11.4%	1009	61	5.8%
One Year	1215	167	12.1%	990	56	5.4%

#### Cholecystectomy

<u>Reason for Proxy</u>	<u>Baseline</u>		<u>Midpoint</u>		<u>One Year</u>	
Not available	14	7.78%	12	7.36%	22	13.17%
Hard of hearing	64	35.56%	60	36.81%	58	34.73%
Incapable of answering	74	41.11%	65	39.88%	61	36.53%
Other	28	15.56%	26	15.95%	26	15.57%

#### Total Hip Replacement

<u>Reason for Proxy</u>	<u>Baseline</u>		<u>Midpoint</u>		<u>One Year</u>	
Not available	3	4.62%	9	14.75%	12	21.43%
Hard of hearing	33	50.77%	22	36.07%	20	35.71%
Incapable of answering	21	32.31%	20	32.79%	19	33.93%
Other	8	12.31%	10	16.39%	5	8.93%



ALFONSO A. A.

ALFONSO A. A.



## Number of Hospitals by FI in Full Study

## ATTENDIA AI









## Appendix AF

### Mean and Range for the Number of Cases per Hospital by State and MSA in Full Study

FI	Eligible									Completed Survey								
	Both Proced.			Chole			Hip			Both Proced.			Chole			Hip		
	Mean	Range		Mean	Range		Mean	Range		Mean	Range		Mean	Range		N	%	
40 (CA)	Urban	3.9	1 - 18	2.3	1-9		2.9	1-13		2.8	1-12		1.6	1-6		2.2	1-11	
	Rural	2.3	1 - 6	1.4	1-3		1.9	1-4		2.4	1-4		1.7	1-3		1.9	1-3	
90 (FL)	Urban	4.9	1 - 18	3.3	1-12		2.9	1-9		4.1	1-16		2.8	1-10		2.6	1-8	
	Rural	3.1	1 - 12	2.3	1-6		2.7	1-8		2.4	1-8		1.8	1-4		3.0	1-5	
121 (IL)	Urban	3.6	1 - 16	2.1	1-10		1.9	1-6		2.7	1-12		1.8	1-7		1.7	1-5	
	Rural	2.7	1 - 8	2.7	1-7		1.1	1-2		2.4	1-6		2.2	1-5		1.1	1-2	
130 (IN)	Urban	4.8	1 - 19	3.3	1-15		2.8	1-9		3.3	1-10		2.3	1-7		2.4	1-8	
	Rural	2.4	1 - 10	2.0	1-7		1.6	1-3		2.0	1-7		1.5	1-5		1.6	1-3	
220 (MN)	Urban	5.3	1 - 25	1.9	1-4		4.1	1-22		4.3	1-20		1.7	1-4		4.1	1-17	
	Rural	2.1	1 - 7	1.6	1-6		1.6	1-4		1.7	1-6		1.4	1-5		1.3	1-3	
230 (MS)	Urban	6.2	1 - 18	5.9	1-15		2.3	1-5		3.1	1-9		3.0	1-6		1.8	1-3	
	Rural	5.1	1-27	3.7	1-14		3.4	1-13		3.5	1-17		2.3	1-8		2.6	1-9	
310 (NC)	Urban	3.6	1-10	2.5	1-8		2.7	1-10		3.1	1-10		2.1	1-5		2.5	1-10	
	Rural	2.8	1-17	2.5	1-10		1.7	1-7		2.3	1-10		2.0	1-6		1.6	1-5	
308 (NY)	Urban	3.5	1-26	2.2	1-9		2.6	1-26		2.8	1-22		1.7	1-6		2.5	1-22	
	Rural	2.2	1-4	1.8	1-4		1.2	1-2		1.7	1-3		1.4	1-2		1.1	1-2	
332 (OH)	Urban	4.2	1-15	3.0	1-11		2.3	1-8		2.9	1-11		2.1	1-7		2.0	1-6	
	Rural	2.4	1-11	1.9	1-10		1.7	1-6		2.4	1-6		1.8	1-6		1.8	1-4	
363 (PA)	Urban	3.5	1-12	2.5	1-9		2.1	1-8		2.7	1-11		1.9	1-7		1.8	1-7	
	Rural	2.6	1-8	1.8	1-6		1.8	1-3		2.2	1-7		1.6	1-5		1.9	1-3	
400 (TX)	Urban	4.7	1-22	3.5	1-18		2.6	1-9		3.3	1-12		2.4	1-8		2.2	1-5	
	Rural	2.1	1-7	1.9	1-5		2.0	1-4		1.9	1-5		1.7	1-4		1.6	1-3	
450 (WI)	Urban	3.3	1-11	2.1	1-6		2.4	1-8		3.0	1-10		1.7	1-4		2.2	1-8	
	Rural	1.8	1-6	1.4	1-3		1.6	1-4		1.8	1-6		1.2	1-2		1.5	1-4	







# Appendix AG

## Number of Hospitals Participating from Each FI by Various Hospital Characteristics in Full Study

Total Hospitals	California		Florida		Illinois		Indiana		Minnesota		Mississippi	
	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>	<u>Number</u>	<u>Percent</u>
<u>Characteristics</u>												
<u>Total Beds</u>												
under 100 beds	23	20.0%	10	11.9%	12	13.4%	21	30.9%	24	46.2%	9	29.0%
101-200 beds	26	22.6%	20	23.8%	27	30.3%	14	20.6%	10	19.2%	11	35.5%
201-300 beds	25	21.7%	16	19.1%	19	21.4%	16	23.5%	6	11.5%	4	12.9%
301-400 beds	27	23.5%	12	14.3%	12	13.5%	6	8.8%	5	9.6%	2	6.5%
401 and over	14	12.2%	26	30.9%	19	21.4%	11	16.2%	7	13.5%	5	16.1%
<u>Ownership</u>												
Non profit	61	53.0%	46	54.8%	45	50.5%	23	33.8%	27	51.9%	13	41.9%
Hospital district	13	11.3%	10	11.9%	4	4.5%	0	0.0%	5	9.6%	0	0.0%
For-profit	11	9.6%	17	20.2%	3	3.4%	2	3.0%	0	0.0%	3	9.7%
Government	5	4.4%	1	1.2%	3	3.4%	26	38.2%	13	25.0%	14	45.2%
Religious	25	21.7%	10	11.9%	34	38.2%	17	25.0%	7	13.5%	1	3.2%
<u>Service Type</u>												
General	114	99.1%	84	100.0%	89	100.0%	68	100.0%	52	100.0%	30	96.8%
Medical/Surgical	1	.9%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Orthopedic	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	1	3.2%
Rehab	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Other Specialty												
<u>Teaching</u>												
Residency training	2	1.7%	1	1.2%	0	0.0%	1	1.5%	0	0.0%	0	0.0%
Medical school affiliation	2	1.7%	4	4.8%	5	5.6%	0	0.0%	0	0.0%	4	12.9%
Both	21	18.3%	8	9.5%	28	31.5%	15	22.1%	14	26.9%	3	9.7%





# Number of Hospitals Participating from Each FI by Various Hospital Characteristics in Full Study

Total Hospitals	New York		North Carolina		Ohio		Pennsylvania		Texas		Wisconsin	
Characteristics	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total Beds												
under 100 beds	7	6.3%	13	19.4%	14	14.6%	12	12.6%	24	26.3%	21	35.0%
101-200 beds	16	14.3%	22	32.8%	33	34.4%	32	33.7%	19	20.9%	20	33.3%
201-300 beds	38	33.9%	14	20.9%	18	18.8%	24	25.3%	18	19.8%	9	15.0%
301-400 beds	11	9.8%	6	9.0%	8	8.3%	11	11.6%	12	13.2%	6	10.0%
401 and over	40	35.7%	12	17.9%	23	23.9%	16	16.8%	18	19.8%	4	6.7%
Ownership												
Non profit	87	77.7%	39	58.2%	57	59.4%	90	94.7%	33	36.3%	40	66.7%
Hospital district	0	0.0%	6	9.0%	0	0.0%	0	0.0%	16	17.6%	0	0.0%
For-profit	4	3.6%	6	9.0%	2	2.1%	0	0.0%	7	7.7%	0	0.0%
Government	3	2.7%	15	22.4%	10	10.4%	0	0.0%	9	9.9%	2	3.3%
Religious	18	16.0%	1	1.5%	27	28.1%	5	5.3%	26	28.5%	18	30.0%
Service Type												
General												
Medical/Surgical	110	98.2%	66	98.5%	96	100.0%	95	100.0%	90	98.9%	60	100.0%
Orthopedic	0	.9%	1	1.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Rehab	1	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Other Specialty		.9%	0	0.0%	0	0.0%	0	0.0%	1	1.1%	0	0.0%
Teaching												
Residency training	6	5.4%	2	3.0%	1	1.0%	2	2.1%	9	9.9%	1	1.7%
Medical school affiliation	7	6.3%	0	0.0%	9	9.4%	5	5.3%	2	2.2%	2	3.3%
Both	45	40.2%	12	17.9%	24	25.0%	27	28.4%	21	23.1%	13	21.7%







## Appendix AH

### Comparison of Cholecystectomy Patients having MEDPAR or Outpatient Medicare Records but no Physician Part B Records

<u>FI</u>	No Physician <u>Record</u>	<u>Percent</u>	<u>Total Sample*</u>	<u>Percent</u>
California	24	15.6%	135	8.9%
Florida	19	12.3%	206	13.6%
Illinois	9	5.8%	141	9.3%
Indiana	13	8.4%	115	7.6%
Minnesota	7	4.5%	63	4.1%
Mississippi	4	2.6%	64	4.2%
New York	20	13.0%	147	9.7%
North Carolina	10	6.5%	114	7.5%
Ohio	13	8.4%	150	9.9%
Pennsylvania	14	9.1%	142	9.3%
Texas	15	9.7%	169	11.1%
Wisconsin	6	3.9%	74	4.8%

<u>Length of Stay</u>	No Physician <u>Record</u>	<u>Percent</u>	<u>Total Sample**</u>	<u>Percent</u>
0	43	28%	316	20%
1 day	39	25%	348	23%
2 days	20	13%	127	8%
3 days	8	5%	96	6%
4 days	6	4%	95	6%
5 days	4	3%	86	5%
> 5 days	34	22%	501	32%

<u>Location</u>	No Physician <u>Record</u>	<u>Percent</u>	<u>Total Sample</u>	<u>Percent</u>
Urban	117	76%	1155	73.6%
Rural	37	24%	414	26.4%

<u>Stay Type</u>	No Physician <u>Record</u>	<u>Percent</u>	<u>Total Sample</u>	<u>Percent</u>
Inpatient	104	67.5%	1044	66.5%
Outpatient	50	32.5%	525	33.5%

<u>Type of Cholecystectomy</u>	No Physician <u>Record</u>	<u>Percent</u>	<u>Total Sample</u>	<u>Percent</u>
Open	37	24%	489	31.2%
Laparoscopic	117	76%	1080	68.8%

\* includes only completed surveys

\*\* includes completed surveys and deceased at baseline









# Appendix AI

## Length of Stay for Cholecystectomy Patients by Bill Type in Full Study

Length of Stay	Inpatient (n)				Outpatient (n)			
	Complete	Incomplete	Dead	Eligible	Complete	Incomplete	Dead	Eligible
0 days	30	9	0	42	285	80	1	460
1 day	148	48	0	211	200	78	0	373
2 days	102	39	0	159	25	8	0	58
3 days	85	49	3	152	8	5	0	21
4 days	93	58	2	165	0	1	0	1
5 days	83	46	1	140	2	0	0	2
6 days	74	33	2	116	2	0	0	5
7 days	78	46	3	141	1	0	0	1
8 days	67	28	3	112	0	0	0	1
9 days	46	25	0	84	0	0	0	0
10 days	36	20	2	62	0	0	0	0
11-20 days	138	132	20	326	0	0	0	0
21-30 days	10	19	6	44	0	0	0	0
31-40 days	4	6	4	14	1	0	0	1
> 40 days	2	5	2	10	0	0	0	0
Mean	6.12	8.5	16.8	7.34	.6	.7	0	.7
Median	5.00	6	14	6.00	0	1.00	0	1.0







## Appendix AJ

### Outpatient Definitions by Length of Stay Based Upon Hospital Medical Record Data Laparoscopic Cholecystectomies

<u>Admission Status</u>	<u>Discharge from PACU</u>	<u>Length of Stay</u>	<u>Conversion to Inpatient Status</u>	<u>Number of Patients</u>	
Outpatient	Home	0	No	8	True Outpatient
Outpatient	Observation/ hospital bed	0	No	258	True Outpatient
Outpatient	Observation/ hospital bed	1 day	No	207	Probable Outpatient
Outpatient	Observation/ hospital bed	2 days	No	32	Dubious Outpatient
Outpatient	Observation/ hospital bed	3 days	No	8	Dubious Outpatient
Outpatient	Observation/ hospital bed	4 days or more	No	8	Dubious Outpatient
Outpatient	Observation/ hospital bed		Yes	72	Inpatient









**Appendix AK**  
**Inpatient/Outpatient Status**  
**by Source of Data**  
**Open and Laparoscopic Cholecystectomies**

Medical Record Data

<u>Claims Data</u>	<u>True Outpatient</u>	<u>Probable Outpatient</u>	<u>Dubious Outpatient</u>	<u>Inpatient</u>	<u>Missing</u>
Inpatient	17	30	15	941	35
Outpatient	249	177	33	66	6

Medical Record Data

<u>Medicare Files</u>	<u>True Outpatient</u>	<u>Probable Outpatient</u>	<u>Dubious Outpatient</u>	<u>Inpatient</u>	<u>Missing</u>
Inpatient/ MEDPAR	2	24	12	892	35
Outpatient	253	178	35	72	5
Missing	11	5	1	43	3

Claims Data - inpatient/outpatient status determined by type of bill indicator

Medical Record - inpatient/outpatient status determined by looking at original admission and then checking for conversion to inpatient status

Medicare files - inpatient/outpatient status determined by Part A or Part B paying for the sentinel event

Missing Records in medical records can mean either the record was never obtained (13) or the record was not abstracted because it did not meet eligibility criteria (29)

Missing Records in Medicare files means that the sentinel event was never found in MEDPAR or outpatient files







**Table AL**

**Elective Total Hip Replacement Results  
in Full Study**

Number in Study = 1120

<u>Age</u>	<u>Percent of Total</u>
<65	.3%
65-70	35.8%
71-74	24.2%
75-79	23.2%
80-84	11.3%
85+	4.9%
<u>Race</u>	
White	95.5%
African American	2.2%
Other	1.8%
<u>Marital Status</u>	
Married	59.4%
Remarried	.6%
<u>Education</u>	
<High School	24.2%
High School	29.0%
College	37.8%
>College	8.8%
<u>Gender</u>	
Male	38.7%
Female	61.3%









## Appendix AM

### Length of Stay for Elective Total Hip Replacement in Full Study

#### Patients Completing Baseline Survey

<u>Length</u>	<u>Number</u>	<u>Percent</u>
0 days	2	0.2%
1 day	0	0.0%
2 days	7	0.6%
3 days	105	9.4%
4 days	183	16.3%
5 days	213	19.0%
6 days	208	18.6%
7 days	160	14.3%
8 days	94	8.4%
9 days	48	4.3%
10 days	29	2.6%
11-20 days	65	5.8%
21-30 days	5	0.4%
31-40 days	1	0.1%
>40 days	0	0.0%
TOTAL	1120	100.0%

Mean 6.1  
Median 6.0

#### Patients Deceased at Baseline

<u>Length</u>	<u>Number</u>	<u>Percent</u>
0 days	1	7.7%
1 day	0	0.0%
2 days	1	7.7%
3 days	1	7.7%
4 days	0	0.0%
5 days	1	7.7%
6 days	2	15.4%
7 days	2	15.4%
8 days	0	0.0%
9 days	1	7.7%
10 days	0	0.0%
11-20 days	3	23.0%
21-30 days	0	0.0%
31-40 days	0	0.0%
>40 days	1	7.7%
TOTAL	13	100.0%

Mean 6.1  
Median 6.0







## Appendix AN

### Elective Total Hip Replacement Results Midpoint vs. One Year with Baseline Comparison

Total Number in Study	1120	1070	1046
	<u>Baseline</u>	<u>Midpoint</u>	<u>1 Year</u>
Distance walked			
Step or Two	2.6%	0.4%	0.5%
Across Room	18.3%	3.7%	1.8%
< 1 Block	33.8%	15.2%	6.9%
1 Block to a Mile or More	43.0%	80.3%	90.5%
Never Did It	1.6%	0.1%	0.2%
Assistive Device	57.9%	48.2%	32.6%
Trouble Climbing One Flight	61.9%	43.5%	28.6%
Trouble Bend, Kneel, Stoop	77.4%	57.5%	40.0%
Trouble Shoes, Socks, Stockings	69.0%	50.9%	35.2%
Assistive Device for Shoes, Socks, Stockings	26.9%	61.7%	49.8%
Leave House	76.3%	91.7%	94.8%
Hip pain walking	94.50%	24.9%	20.3%
Severe	67.5%	14.4%	15.2%
Moderate	26.5%	35.6%	38.4%
Mild	5.5%	49.3%	46.4%
Hip pain sitting	54.3%	13.6%	11.3%
Severe	44.0%	10.3%	12.0%
Moderate	40.9%	27.7%	33.3%
Mild	14.5%	61.9%	54.7%
Hip pain climbing stairs	68.3%	14.5%	11.8%
Severe	59.9%	9.7%	13.0%
Moderate	30.9%	32.1%	38.2%
Mild	8.6%	57.6%	48.8%
Hip pain while lying in bed	65.90%	18.6%	15.1%
Severe	46.30%	8.0%	10.8%
Moderate	41.20%	27.8%	31.2%
Mild	11.90%	64.2%	58.0%
Pain in Hip	83.4%	26.9%	22.5%
Pain in Thigh	59.6%	23.0%	26.1%
Pain in Buttocks	33.9%	11.9%	12.7%
Pain in Knee	64.8%	30.3%	29.1%
Seek Second Opinion	56.3%		
Health Rating			
Excellent	32.6%	33.9%	31.8%
Good	50.7%	53.2%	52.4%
Fair	12.9%	10.8%	13.8%
Poor	3.3%	1.1%	2.1%









## Appendix AO

### Cholecystectomy Results in Full Study

Total Number in Study = 1520

<u>Age</u>	<u>Percent of Total</u>
<65	.6%
65-70	40.0%
71-74	26.0%
75-79	19.1%
80-84	10.6%
85+	3.8%
<u>Race</u>	
White	93.3%
African American	3.2%
Other	3.1%
<u>Marital Status</u>	
Married	62.2%
Remarried	.6%
<u>Education</u>	
<High School	30.3%
High School	32.6%
College	30.8%
>College	5.8%
<u>Gender</u>	
Male	38.6%
Female	61.4%







## Appendix AP

### Length of Stay for Cholecystectomy in Full Study

#### Patients Completing Survey

<u>Length</u>	<u>Laparoscopic Cholecystectomy</u>	<u>Percent</u>	<u>Open Cholecystectomy</u>	<u>Percent</u>
0 days	312	29.2%	3	0.7%
1 day	344	32.1%	4	0.9%
2 days	112	10.5%	15	3.3%
3 days	64	6.0%	29	6.4%
4 days	45	4.2%	48	10.7%
5 days	43	4.0%	42	9.3%
6 days	42	3.9%	34	7.6%
7 days	27	2.5%	52	11.6%
8 days	21	2.0%	46	10.2%
9 days	13	1.2%	33	7.3%
10 days	4	0.4%	32	7.1%
11-20 days	38	3.6%	100	22.2%
21-30 days	2	0.2%	8	21.8%
31-40 days	3	0.3%	2	0.4%
>40 days	0	0.0%	2	0.4%
TOTAL	1070	100.0%	450	100.0%
	Mean 2.4 days Median 1.0 days		Mean 7.7 days Median 7.0 days	

#### Patients Deceased at Baseline

<u>Length</u>	<u>Laparoscopic Cholecystectomy</u>	<u>Percent</u>	<u>Open Cholecystectomy</u>	<u>Percent</u>
0 days	1	10.0%	0	0.0%
1 day	0	0.0%	0	0.0%
2 days	0	0.0%	0	0.0%
3 days	1	10.0%	2	5.1%
4 days	1	10.0%	1	2.6%
5 days	0	0.0%	1	2.6%
6 days	0	0.0%	2	5.1%
7 days	0	0.0%	3	7.7%
8 days	1	10.0%	2	5.1%
9 days	0	0.0%	0	0.0%
10 days	0	0.0%	2	5.1%
11-20 days	3	30.0%	17	43.5%
21-30 days	2	20.0%	4	10.3%
31-40 days	0	0.0%	4	10.3%
>40 days	1	10.0%	1	2.6%
TOTAL	10	100.0%	39	100.0%
	Mean 16 days Median 11 days		Mean 13 days Median 11 days	









## Appendix AQ

### Cholecystectomy Results: Midpoint vs. One Year with Baseline Comparison

Total Number in Study	1520	1431	1382
	<u>Baseline</u>	<u>Midpoint</u>	<u>One Year</u>
CLASSIC PAIN			
Had described pain	62.1%	7.8%	7.5%
Very much the same	49.5%	36.4%	21.6%
Somewhat the same	44.7%	57.3%	74.2%
Not the same	4.2%	5.5%	3.1%
Gallbladder pain	64.2%	12.5%	8.2%
Right upper abdomen	72.1%	71.7%	69.7%
Just below breast bone	81.9%	61.4%	70.6%
Radiating to right shoulder	28.7%	18.5%	19.3%
Radiating through to right U	50.8%	30.4%	31.2%
Brought on by:			
Eating	49.5%	34.8%	35.8%
Physical activity	9.3%	11.4%	10.1%
Bowel movements	8.0%	11.4%	4.6%
SHARP PAIN	55.7%	39.1%	40.4%
Steadiness:			
Steady	71.6%	48.6%	63.6%
Come and go	27.4%	50.0%	31.8%
Frequency:			
Several times a day	14.0%	13.9%	9.1%
Daily	10.3%	18.1%	27.3%
Several times a week	14.4%	31.9%	27.3%
Several times a month	12.5%	18.1%	27.3%
Several times a year	11.3%	1.4%	6.8%
<Several times a year	35.4%	13.9%	
CRAMPING PAIN	27.5%	23.9%	33.9%
Steadiness:			
Steady	55.8%	43.2%	67.6%
Come and go	43.0%	56.8%	32.4%
Frequency:			
Several times a day	13.2%	9.1%	
Daily	12.5%	15.9%	21.6%
Several times a week	18.1%	43.2%	32.4%
Several times a month	17.0%	11.4%	27.0%
Several times a year	10.2%	6.8%	8.1%
<Several times a year	24.9%	11.4%	8.1%





	<u>Baseline</u>	<u>Midpoint</u>	<u>One Year</u>
BURNING PAIN	24.9%	14.1%	15.6%
Steadiness:			
Steady	66.3%	57.7%	70.6%
Come and go	32.5%	42.3%	29.4%
Frequency:			
Several times a day	15.8%	7.7%	5.9%
Daily	13.3%	15.4%	11.8%
Several times a week	18.3%	30.8%	41.2%
Several times a month	16.3%	23.1%	29.4%
Several times a year	9.6%	3.8%	11.8%
<Several times a year	23.8%	19.2%	
Nausea	40.6%	10.6%	12.7%
Vomiting	25.5%	4.5%	4.7%
Belching	47.3%	31.0%	37.6%
Flatulence/gas	58.8%	49.9%	53.7%
Foods gave pain or made sick	45.1%	22.9%	29.6%
Greasy	69.4%	41.5%	29.9%
Fatty	58.4%	31.6%	21.6%
Dairy	32.5%	17.9%	15.3%
Others	67.8%	75.8%	84.2%
Surgery/emergency/scheduled			
Emergency	30.3%		
Scheduled	69.6%		
Sought second opinion	51.2%		
Resumed usual activity level	73.5%		
One week	44.1%	42.9%	
Two weeks	24.0%	21.2%	
Three weeks	10.7%	8.1%	
Four weeks	3.6%	1.2%	
Five weeks	8.4%	12.0%	
>Five weeks	7.6%	13.0%	
Health rating			
Excellent	23.1%	28.5%	25.9%
Good	47.8%	51.5%	53.8%
Fair	22.5%	16.6%	17.5%
Poor	6.1%	3.1%	2.6%



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